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### STORMWATER POLLUTION CONTROL PLAN

#### SCHNITZER STEEL PRODUCTS CO.

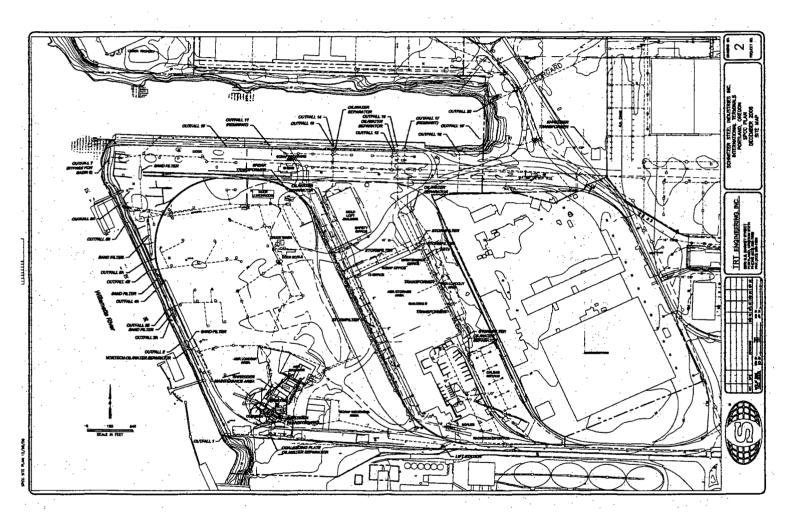
**International Terminals** 

12005 N Burgard Road Portland, Oregon 97203

December 2006

**USEPA SF** 

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# STORMWATER POLLUTION CONTROL PLAN SCHNITZER STEEL PRODUCTS CO. International Terminals

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# STORMWATER POLLUTION CONTROL PLAN SCHNITZER STEEL PRODUCTS CO. International Terminals

#### 1.0 PLAN OVERVIEW

#### 1.1 Introduction

This Stormwater Pollution Control (SWPC) Plan covers the operations of the Schnitzer Steel Products Co. (SSP) scrap metal recycling facility and International Terminals (IT) cargo facility located in the Burgard Industrial Park on the east bank of the Willamette River in north Portland, Oregon. This SWPC Plan was prepared in accordance with the requirements of the Oregon Department of Environmental Quality (DEQ) General Permit 1200-Z issued under the National Pollutant Discharge Elimination System (NPDES).

The U.S. Environmental Protection Agency's (EPA's) model permit for the scrap processing and recycling industry (U.S. EPA, 1993), and the DEQ's *Guidance Document for Preparation of the NPDES Storm Water Pollution Control Plan* (DEQ, 1997) were used as guidance for the preparation of this SWPC Plan.

This SWPC Plan describes the SSP-IT facility and its operations; identifies potential sources of stormwater pollution at the facility; and describes appropriate stormwater pollution control measures to reduce the potential for discharge of pollutants in stormwater run-off. In addition, the requirement for periodic review of this Plan is established.

#### 1.2 General Facility Information

Following is a brief summary of general facility information related to the SSP-IT site:

Name of Facility:

Schnitzer Steel Products Co.

Owner:

Schnitzer Steel Products Co.

Operator:

Schnitzer Steel Products Co.

**Facility Address:** 

12005 N Burgard Road

Portland, Oregon 97203

Mailing Address:

P.O. Box 10047

Portland, Oregon 97296-0047

**Facility Contacts:** 

Primary:

Jim Goodrich, General Manager

(503) 286-5771

(503) 793-0023 (cell)

Alternate:

Jim Jakubiak, Environmental Administrator

(503) 286-6976

(503) 519-4795 (cell)

Alternate:

Mathew Cusma, Environmental Administrator

(503) 286-6944

(503) 209-6057 (cell)

**Number of Employees:** 

100 (approximate - varies)

Operations Description: Ferrous scrap metal recovery and recycling. Scrap metals are delivered to the site from private and commercial parties by truck, rail, or barge, and are graded and sorted on-site. Scrap metals may be resized by shredding, shearing, or torching, and are ultimately shipped off site by truck, rail, barge, or ship for use as feed stock in domestic or foreign steel mills.

#### Standard Industrial

Classification (SIC) Code: 5093, Scrap and Waste Materials

<u>Site Drainage</u>: The site is flat and has been graded to promote desired drainage patterns. The site is predominantly paved (asphalt) and stormwater drains by sheet flow to catch basins. Catch basins drain through subsurface piping to oil/water separators, which discharge either to an onsite process water management system, or off site to the Willamette River.

Stormwater Outfalls: Sixteen active outfalls discharge to the Willamette River.

#### 1.3 Plan Objectives

In November 1990, the U.S. EPA adopted regulations (40 CFR Parts 122, 123, and 124) to control stormwater discharges from industrial facilities and certain municipalities through the NPDES permit program. The goal of the NPDES permit program is to improve the quality of surface waters by reducing the quantity of pollutants that are potentially contained in stormwater run-off. In the State of Oregon, the Oregon DEQ has been granted the authority to administer the NPDES program.

The NPDES program specifies certain SIC categories [40 CFR §122.26(b)(14)(i-ix, xi)] for which discharge permits are required. Any facility falling within such a category, and from which stormwater leaves the site and enters surface waters through a "point source," must apply for a stormwater discharge permit under the NPDES system. In addition, facilities subject to NPDES permitting requirements, which include the SSP-IT facility, are required under the permit conditions to prepare and implement a Stormwater Pollution Control Plan. The SSP-IT facility is currently permitted to discharge stormwater to waters of the State under General Permit 1200-Z.

The objectives of this SWPC Plan are: 1) to identify potential sources of pollution at the facility which could adversely affect the quality of the stormwater discharges from the site, and 2) to describe appropriate pollution control measures and best management practices (BMPs) that will address the identified potential pollution sources and stormwater quality requirements for this facility. Proposed control measures include active potential source isolation and abatement, as well as support programs such as a periodic facility inspection program and detailed recordkeeping and reporting procedures. These measures will assist the compliance staff in maintaining compliance with the terms and conditions of General Permit 1200-Z.

#### 1.4 **SWPC Plan Organization**

The SWPC Plan is organized into sections as follows:

#### Section 2.0: Stormwater Pollution Prevention Team

Personnel responsible for implementation of the SWPC Plan are identified and their specific responsibilities related to stormwater management are detailed.

#### Section 3.0: Facility Description

A detailed description of the site layout, facility operations, and potential sources of stormwater pollution is presented. A facility location map, a site plan showing drainage and other relevant features, an inventory of significant materials potentially exposed to stormwater, and a discussion of past spills are also included.

#### Section 4.0: Stormwater Pollution Controls

Stormwater management controls, and spill prevention and response procedures are detailed. Preventive maintenance measures, the employee training program, and periodic SWPC Plan review and amendment requirements are set forth.

#### Section 5.0: Stormwater Monitoring Program

The stormwater monitoring program, including sampling frequencies and protocols, analytical parameters, and recordkeeping and reporting requirements are presented.

#### Section 6.0: Implementation Schedule

The SWPC Plan implementation schedule and the discharge permit compliance schedule are detailed.

#### Section 7.0: Additional Permit Requirements

Oregon Administrative Rules (OAR) specific to the Willamette Basin are addressed.

#### Section 8.0: Plan Certification

Certification of the SWPC Plan by the owner/operator is presented.

#### 2.0 STORMWATER POLLUTION PREVENTION TEAM

Stormwater pollution prevention depends on the awareness and cooperation of all SSP employees. However, the Stormwater Pollution Prevention Team is primarily responsible for developing, implementing, maintaining and revising this SWPC Plan; ensuring facility employees receive appropriate training in BMPs related to stormwater; conducting periodic site inspections to identify areas needing improvement; and ensuring that any identified deficiencies are corrected in a timely manner.

Team members and their specific duties and responsibilities related to stormwater management are detailed below. All members of the team are familiar with the management and operations of the SSP-IT facility.

Jim Goodrich, General Manager: Responsible for supervision and direction of all stormwater pollution prevention activities at the facility, including compliance with the General Permit and the SWPC Plan. Releases annual stormwater quality reports to the DEQ (July 15<sup>th</sup> each year), and approves necessary budget items and schedules for implementation of pollution control measures as required by the SWPC Plan.

Mathew Cusma, Environmental Administrator: Responsible for overseeing day-today SWPC Plan implementation. Performs necessary recordkeeping and reporting activities. Assists with employee training related to stormwater pollution prevention. Conducts periodic site inspections and SWPC Plan effectiveness evaluations. Jim Jakubiak, Environmental Administrator: Responsible for overseeing day-to-day SWPC Plan implementation. Performs necessary recordkeeping and reporting activities. Assists with employee training related to stormwater pollution prevention. Conducts periodic site inspections and SWPC Plan effectiveness evaluations.

#### 3.0 FACILITY DESCRIPTION

#### 3.1 Facility Location and Description

The SSP-IT facility occupies approximately 70 acres of upland in the Rivergate industrial area between the Willamette River and North Burgard Road in Portland, Oregon. An additional approximately 50 acres of industrial land contiguous to the SSP-IT facility is owned by Schnitzer Investment Corp. (SIC), but is leased to other tenants, and is therefore not covered under this SWPC Plan. Access to the facility is provided primarily by an entrance roadway off of North Burgard Road near the intersection of North Terminal Road. The site can also be accessed using North Sever Road and Time-Oil Road, although these two entrances primarily serve neighboring facilities. A facility location map is provided as Figure 1.

The site is fenced on three sides, with the fourth side bounded by the river. The active portion of the property is bounded as follows:

- On the north, by a marine vessel berthing slip, Jefferson Smurfit Corporation, and Time Oil Co.
- On the east, by Northwest Pipe & Casing Co., Lampros Steel, and Western Machine Works (tenant of SIC), and by North Burgard Road.
- On the south, by Terminal 4, a shipping terminal owned and operated by the Port of Portland.
- · On the west, by the Willamette River.

Properties on the north and east sides of the site are not addressed in this SWPC Plan, except to the extent that their discharge may affect discharges from the outfalls associated with SSP-IT. SSP-IT is in continuing communication with these facilities regarding issues related to stormwater management.

The facility is predominantly paved (asphalt), and includes two large warehouses, three modular office buildings, a break/locker room, and two scale houses. A large automobile shredder, including associated magnetic separators and conveyors, is located at the southwest corner of the property, and a hydraulic guillotine shear is located in the north-central portion of the property.

#### 3.2 Operations Description

Metal scrap consisting of a wide variety of recycled items including metal parts, automobiles, appliances, and steel fabrication remnants is delivered to the facility from private and commercial parties by truck, rail, or barge. The scrap is weighed, graded and sorted according to its type, size and thickness, and the transport is directed to the appropriate location at the facility for offloading.

Once received, the scrap material is either processed immediately (e.g., in the shredder or shear, depending on the grade of the material), or is staged for future processing or offsite transfer. Materials processed in the shredder include automobiles, appliances, baled and loose tin and sheet metal, and other relatively thin metals. The shredder reduces the size of the scrap and separates the ferrous metals from non-ferrous metals and non-metallics (Automobile Shredder Residue [ASR]) using a variety of means including magnetic and gravity separators. The shear is used to re-size steel plate, heavy-walled pipe, cable, and other relatively thick scrap, using a hydraulic guillotine. Items not amenable to processing in either the shredder or the shear may be cut by portable shears or by torch, or transferred offsite as-is.

Processed and unprocessed scrap, and some processing residues (e.g., ASR, nonmetallic components, etc.), are temporarily staged at the facility in outdoor piles until offsite shipment is arranged. The processed and sorted scrap is then loaded into trucks, rail cars, cargo containers, barges, or ships for shipment off site to domestic and foreign steel mills, where the material is melted and formed into new steel for manufacturing of new products. The ASR is loaded on trucks for shipment offsite for use as an approved alternate daily cover material at appropriate Subtitle D landfills.

In addition to these primary facility operations, several support operations, including weigh-scales, vehicle and equipment maintenance, steel remnant storage and sales, bulk material (e.g., pig iron, ferro-manganese, silica-manganese, etc.) storage and sales, and truck washing, are conducted at the facility. Materials related to these support operations that have the potential to adversely impact stormwater, including petroleum products, coolants (glycol), and waste fluids (oils and coolant), are stored either indoors or in a covered outdoor area provided with secondary containment. Steel, pig iron, manganese, and similar bulk materials are typically stored outdoors in paved areas divided by steel retaining walls.

#### 3.3 Site Map

Pursuant to the requirements of NPDES General Permit 1200-Z, a site map of the facility is provided with this SWPC Plan. The site map shows the following features:

Drainage patterns.

- Drainage and discharge structures.
- · Catch basins.
- Sumps.
- Storm sewer piping.
- · Outfalls.
- An outline of the drainage area for each stormwater outfall.
- Paved areas and buildings within each drainage area.
- Areas used for outdoor manufacturing, treatment, storage, and/or disposal of significant materials (no disposal occurs at the site).
- Structural control measures for reducing pollutants in stormwater run-off.
  - Sand filters.
  - Oil/water separators
  - Containment booms.
  - Grease traps.
- Material loading and access areas.
- Hazardous waste treatment, storage and disposal facilities (NONE).
- Locations of wells, including waste injection wells, seepage pits, dry wells, etc. (only one well, a cooling water supply well, exists on-site).
- Locations of springs, wetlands, and other surface water bodies.
  - Willamette River.
  - Berthing Slip (appendage of Willamette River).

#### 3.4 Stormwater Drainage

Stormwater run-off at the SSP-IT facility is routed to 16 active outfalls which discharge into the Willamette River. Each of the outfalls serves a specific drainage area within the facility boundaries, as shown on the site map provided with this SWPC Plan. In addition, there are two remnant outfalls at the site related to historic operations that no longer convey stormwater. Table 1 presents a summary of each of the outfalls at the facility, the activities conducted in the associated drainage areas, and the significant materials present.

In addition to the facility drainage areas served by the outfalls identified in Table 1, precipitation incident in five drainage areas is contained and used in the scrap processing operations at the site. These areas are described below:

 The area immediately surrounding the shredder (approximately four acres) is paved and provided with catch basins piped to a closed-loop collection and treatment.

Table 1:	Site Drainage Summary				
OUTFALL ID 1	DRAINAGE AREA ACTIVITIES	SIGNIFICANT MATERIALS	POTENTIAL POLLUTANTS	END-OF-PIPE TREATMENT	COLLECT SW SAMPLE
1	Entrance roadway, vehicle scales, vehicle parking and traffic, offices	Parked vehicles and traffic, ferrous and non-ferrous materials	Oil and grease, petroleum hydrocarbons, heavy metals (dust)	Coalescing Plate Oil/Water Separator	YES
3A, 3B	Steel storage, bulk material (e.g., pig iron) storage, traffic	Steel and other ferrous materials, vehicles	Oil and grease, petroleum hydrocarbons; heavy metals (dust)	Oil/Water Separator, Sand Filter	Represented by Outfall 6
4A, 4B	Steel storage, bulk material (e.g., pig iron) storage, traffic	Steel and other ferrous materials, vehicles	Oil and grease, petroleum hydrocarbons, heavy metals (dust)	Oil/Water Separator, Sand Filter	Represented by Outfall 6
5A, 5B	Steel storage, bulk material (e.g., pig iron) storage, truck scales, traffic	Steel and other ferrous materials, crushed automobiles, traffic	Oil and grease, petroleum hydrocarbons, heavy metals (dust)	Oil/Water Separator, Sand Filter	Represented by Outfall 6
6A, 7	Ship slip and dock activities, scrap, steel and metal product loading and unloading	Heavy equipment, rail cranes, railroad cars and engines, scrap stockpiles	Oil and grease, petroleum hydrocarbons, heavy metals (dust)	Oil/Water Separator, Sand Filter	YES
13	Dock activities, scrap, steel and metal product loading and unloading	Shear, heavy equipment, railroad cars and engines, scrap stockpiles	Oil and gresse, petroleum hydrocarbons; heavy metals (dust)	Eight-stage Oil/Water Separator	YES
14	Ferrous scrap storage, vehicle and rail road traffic, vehicle parking, offices	Vehicles, ferrous scrap	Oil and grease, petroleum hydrocarbons, heavy metals (dust)	Coalescing Plate Oil/Water Separator	YES
15	Ship slip and dock activities, scrap, steel and metal product loading and unloading	Heavy equipment, rail cranes, railroad cars and engines, scrap stockpiles	Oil and grease, petroleum hydrocarbons, heavy metals (dust)	Eight-stage Oil/Water Separator	Represented by Outfall 13
16	Vehicle parking, equipment storage, non- ferrous scrap receiving and storage, petroleum secondary containment area (under roof)	Parked vehicles, stored equipment, potential spillage	Oil and grease, petroleum hydrocarbons, antifreeze, heavy metals (dust)	Coalescing Plate Oil/Water Separator	Represented by Outfall 14
18	This outfall primarily serves NW Pipe and adjacent properties (permitted separately). A small fuel island at the east end of the property (operated by SSP) is also served by this outfall.	Vehicle traffic, potential spillage	Oil and grease, petroleum hydrocarbons, heavy metals (dust)	N/A	N/A
19	Vehicle traffic, rail car storage	Vehicle traffic, potential spillage	Dust, roadway accumulations	None	Represented by Outfall 20
20	Rail car storage, scrap storage	Ferrous scrap, vehicle traffic, potential spillage	Heavy metals (dust), oil and grease	None	Yes

Outfall locations are shown on the Site Map provided with this SWPC Plan.
 Former Outfalls 2, 8, 9, 10, and 12 have been abandoned. The discharge pipes have been removed and/or cut and grouted.
 Former Outfalls 11 and 17 are remnants of an historical shippard. They are no longer connected to any catch basins at the site, and do not discharge stormwater.

system. In addition to shredder operations, this area is used for staging of unprocessed scrap items, processed scrap, and ASR. Water collected in this area is treated in a 90,000-gallon clarifier through polymer and flocculent addition, and is then transferred to a 270,000-gallon storage tank. Stored water is supplied to the shredder, as needed, to facilitate the shredding of metal materials. The water added to the shredder either evaporates, or is discharged with the shredded material, and drains back into the area catch basins to be recycled (i.e., it is a closed loop system). Because stormwater is not capable of providing sufficient water for this purpose during most of the year, water also may be drawn from a nearby supply well, as well as from the city water supply, to fulfill the need for shredder process water.

- An approximate 400 foot by 60 foot concrete slab (approximately <sup>1</sup>/<sub>2</sub> acre) located along the southern property boundary near the shredder drains through two large oil/water separators. This slab is used for storage of motor blocks, machine turnings, and other potentially oily scrap. Stormwater from this slab is pumped from the oil/water separator to the shredder for use as process water make-up.
- A small paved area south of the shear (approximately <sup>1</sup>/<sub>2</sub> acre) is served by a catch basin which is also piped to the shredder process water recycling system. This area is used primarily for storage of scrap electrical cable.
- The electrical transformer substation serving the shredder (located in the southwest corner of the site) is equipped with secondary containment including a blind sump. A manually operated pump has been installed in the sump to evacuate the containment area, as necessary. This water is pumped into the shredder process water recycling system.
- The concrete slab underlying the hydraulic shear is served by a large sump which collects stormwater. The stormwater is pumped from the sump through two large oil/water separators (located near the dock lunchroom), and then flows to the shredder process water recycling system for re-use.

#### 3.5 <u>Significant Materials and Potential Stormwater Pollutants</u>

The NPDES General Permit 1200-Z requires the SWPC Plan to include a description of "significant materials" at the site which may be exposed to stormwater. For the purposes of the permit, "significant materials" are defined as including, but not limited to, "raw materials; fuels; materials such as solvents, detergents and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical that a facility is required to report pursuant to section 313 of title III of SARA;

fertilizers; pesticides; and waste products such as ash, slag and sludge that have the potential to be released with storm water discharges."

Significant materials that might be expected at the SSP-IT facility include the following:

- Ferrous metal scrap.
- Non-ferrous metal scrap.
- Automobile shredder residue (ASR shredded plastic, fabric, carpet and rubber residuals from the recycling process).
- Bulk materials (pig iron, manganese, etc.).
- Petroleum products (new and used).
- Trash and debris.
- Steel and other metal products.

Both new and used vehicle maintenance fluids (e.g., oil, hydraulic fluid, antifreeze, etc.) are stored in drums and other closed containers, either inside an enclosed building, or within a covered secondary containment area. Potential contact of these materials with stormwater would be limited to leaks from vehicles or equipment, or potential spills.

As a result of the presence of these significant materials, and as summarized above in Table 1, the following potential stormwater pollutants have been identified:

- Petroleum hydrocarbons.
  - Oil and grease.
  - o Hydraulic fluid.
  - Fuels (diesel, gasoline, etc.).
- Antifreeze (glycol).
- Heavy metals (dust).
- Dust/soils.

#### 4.0 STORMWATER POLLUTION CONTROLS

This section describes the stormwater pollution controls that will be implemented at the facility to reduce or eliminate the potential for pollutants to impact stormwater run-off from the site. The following categories of pollution controls are addressed, as required by NPDES General Permit 1200-Z:

- Stormwater Best Management Practices.
  - o Containment.

- Oil and Grease.
- o Waste Chemicals and Material Disposal.
- o Erosion and Sediment Control.
- Debris Control.
- Stormwater Diversion.
- o Covering Activities.
- o Housekeeping.
- o Other Operational Controls. (in addition to those required by permit)
- Spill Prevention and Response.
- Preventive Maintenance.
- Employee Education.
- Recordkeeping and Internal Reporting Procedures.
- Plan Review and Revision Requirements.

#### 4.1 Stormwater Management

The potential for stormwater pollution occurs when incident rainwater or stormwater runoff comes into contact with pollutants on exposed surfaces. Pollutants may dissolve, become suspended, or float on the surface of the water, or may attach (e.g., via absorption or adsorption) to soil particulates suspended in the stormwater. Stormwater quality at the SSP-IT facility has the potential to be impacted as a result of exposed or leaking vehicles or equipment, stockpiled scrap metals and bulk materials, staged shredder residues, and exposed pavement impacted by vehicle traffic and parking.

The vast majority of the SSP-IT property (approximately 90%) is paved (asphalt or concrete), and is graded to drain to catch basins. Most of the site's catch basins are designed as grease traps (i.e., with an inverted drain pipe). Stormwater run-off drains via sheet flow to the catch basins, the majority of which are piped to oil/water separators and/or settling cascades, and ultimately to the outfalls serving the site. There are a total of 18 active stormwater outfalls serving the site, which discharge to the Willamette River either directly, or via the berthing slip. As indicated in Table 1, above, two former outfalls (Outfalls 11 and 17) are remnants of a historical ship yard, and are not currently connected to any catch basins. Five other former outfalls (Outfalls 2, 8, 9, 10 and 12) have been formally abandoned. Outfalls 8, 9, 10 and 12 have been grouted closed.

In addition, Outfall 18 primarily serves facilities east of the SSP-IT facility, at least one of which uses the outfall for permitted discharge of non-contact process water. SSP operates a small fuel island in an area near the east property boundary that is also

served by this outfall. However, stormwater in the fuel island area drains through grease-trap catch basins and through a three-stage oil/water separator prior to joining other flows directed to the outfall.

As described in detail in Section 3.4, and again in Section 4.1.1 below, precipitation incident in five facility drainage areas is contained and used in the scrap processing operations at the site. These areas include the area immediately surrounding the shredder (approximately four acres), a concrete slab at the south property boundary (approximately  $^{1}/_{2}$  acre), a small area south of the shear (approximately  $^{1}/_{2}$  acre), the concrete slab underlying the shear, and a small secondary containment system for the shredder electrical transformer substation.

SSP has implemented a variety of stormwater pollution controls, BMPs, and structural modifications to minimize the potential for contamination of stormwater run-off from the site. Stormwater pollution controls can generally be categorized as either source controls or structural controls. Source controls are practices that reduce or eliminate the potential for contact of stormwater with pollutant sources, or eliminate non-stormwater discharges (e.g., spills or leaks). Structural controls are in-pipe or end-of-pipe treatment systems and discharge volume reduction devices. Some controls, such as containment structures designed to isolate potential pollutant sources, may be classified in either category.

In general, source controls are given the highest priority for implementation under this SWPC Plan. SSP believes that control of potential pollution sources is a more proactive approach to stormwater pollution prevention, minimizing the need for often expensive end-of-pipe treatment technologies. However, due to the nature of scrap recycling operations and existing conditions, structural controls have also played an important role in stormwater pollution prevention at the facility, and will continue to be evaluated for implementation.

Table 2 provides a summary of the existing and proposed stormwater pollution control measures relevant to the SSP-IT facility. As indicated in the table, existing control measures are continuously undergoing evaluation for applicability and effectiveness, and some have been designated for improvement. The following subsections describe the control measures in greater detail.

Table 2: Stormwater Pollution Controls and E	3MPs				
Control/BMP	Frequency	Current	Improvement Needed	Future	Implementation Date
All vehicle maintenance conducted indoors.	at all times	✓ .			
Maintenance schedule developed for all vehicles/equipment (based on manufacturer's recommendations).	once	✓			
Drip pans or other containment in use for all stored vehicles/equipment to contain leaks.	at all times	<b>✓</b>			
Lids/covers in use on all trash bins and dumpsters.	at all times	<b>V</b>			
Oil/water separators inspected for excessive sediment accumulation (i.e., above drain pipe inlet).	monthly	<b>✓</b>			
Oil/water separators pumped out.	as needed	✓			
Additional treatment technology Implemented for outfalls not meeting water quality criteria.	as needed	<b>▼</b>			
All vehicle washing restricted to covered truck wash.	at all times	<b>V</b>	<u>,                                    </u>		-
Existing pavement maintained to minimize erosion.	as needed	_ <b>·</b>			
Accessible areas are swept with a vacuum/broom sweeper.	weekly	✓			
Accessible areas are swept with a magnetic sweeper.	bi-weekly	. 🗸			
Unpaved portions of site inspected for signs of erosion.	monthly	<b>√</b>			
Run-off from shredder residues diverted away from outfalls and into shredder process water.	at all times	1	•		
Run-off from outdoor storage areas diverted away from outfalls.	at all times	1			
Accurate storm sewer drainage and piping layouts maintained.	at all times		~		Ongoing
Hazardous substances properly identified, labeled and stored.	at all times	<b>V</b>			
Spill containment pallets in use under all containers of liquids outside of secondary containment structures.	at all times	1	- 1		
Dust controlled by maintaining clean pavement and posting speed limits, limiting the need for water application.	at all times	1			
Dry cleanup methods (e.g., absorbent) used for spilled or leaked liquids in processing and maintenance areas.	as needed	1			
Corporate Environmental Policy established and reviewed for applicability and adequacy (revised as necessary).	at all times	1			
Scrap acceptance policy established and reviewed for applicability and adequacy (revised as necessary).	as needed	1			٠ .
Procedures established for managing potentially hazardous materials inadvertently received.	annually	. 🗸	-		
Spill prevention and response procedures established.	annually	10 V			
Employees trained regarding corporate environmental policy, stormwater pollution prevention, and spill response.	once	<b>✓</b>			
Stormwater pollution prevention procedures reviewed, and revised as necessary.	once	1		T	
Storm drain covers provided in areas where spills or leaks are most prone to occur.	annually	1		1	
Spill response kits provided in areas where spills are most prone to occur.	annually	1			
Stationary equipment inspected for evidence of leaks or maintenance issues which may result in leaks.	at all times	1			
Stormwater outfall discharges inspected for color, foam, sheen, and other visible evidence of potential problems.	at all times	1		† · · · · ·	

#### 4.1.1 CONTAINMENT

As noted above, containment measures, which involve isolating potential pollution sources from contact with stormwater, may be classified as both a source control and a structural control. Containment measures play an important part in stormwater pollution control at the SSP-IT facility, and are generally considered to be the preferred mechanism for reducing or eliminating adversely impacted stormwater discharges. The following containment measures have been implemented at the facility to minimize the exposure of significant materials to stormwater:

- To the extent possible, vehicle and equipment maintenance activities are conducted inside a fully enclosed, concrete floored building. The building floor slopes toward low spots in the floor that serve as blind liquid collection points. Drains inside the building that connect to the site's stormwater sewer system are not located in areas used for maintenance activities. Vehicle maintenance outside of the building is conducted only in the event of an emergency, such as the failure of hydraulic systems, and is limited to activities necessary to ensure capture and containment of fluids and other significant materials. Equipment maintenance outside of the building is limited to items that are not mobile or portable.
- New and used motor oil, hydraulic fluid, antifreeze, etc. are stored in drums and other sealed containers under roof in a concrete secondary containment unit. Containers are elevated above the floor of the containment structure to facilitate detection and collection of spilled and accumulated liquids. Small quantities of these items may also be stored inside of the vehicle maintenance building, elevated on pallets or placed in polyethylene or steel drip pans.
- The paved area immediately surrounding the automobile shredder (approximately four acres) is sloped toward catch basins, which are piped to a nearby storage tank. Water collected in the tank is treated and supplied to the shredder, as needed, as a coolant/lubricant to facilitate the shredding of metal materials. The water added to the shredder either evaporates in the process, or is discharged with the shredded material, draining back into the catch basins to be again recycled. This area is used for stockpiling of shredded ferrous and non-ferrous metals and ASR prior to offsite shipment.
- An approximate 400 foot by 60 foot concrete slab (approximately <sup>1</sup>/<sub>2</sub> acre) located along the southern property boundary near the shredder drains through two large oil/water separators. This slab is used for storage of motor blocks, machine turnings, and other potentially oily scrap.

Stormwater from this slab is pumped from the oil/water separator to the shredder for use as process water make-up.

- A small paved area south of the shear (approximately <sup>1</sup>/<sub>2</sub> acre) is served by a catch basin which is also piped to the shredder process water recycling system. This area is used primarily for storage of scrap electrical cable.
- The electrical transformer substation serving the shredder (located in the southwest corner of the site) is equipped with secondary containment including a blind sump. A manually operated pump has been installed in the sump to evacuate the containment area, as necessary. This water is pumped into the shredder process water recycling system.
- The concrete slab underlying the hydraulic shear is served by a large sump
  which collects stormwater. The stormwater is pumped from the sump
  through two large oil/water separators (located near the dock lunchroom),
  and then flows to the shredder process water recycling system for re-use.
- The electrical transformer substation serving the shredder (located in the southwest corner of the site) is equipped with secondary containment including a blind sump. A manually operated pump has been installed in the sump to evacuate the containment area, if necessary.
- Drip pans are placed beneath vehicles and equipment that show evidence
  of potential oil or fluid leakage, and that are parked or stored for periods
  longer than one shift (eight hours).

#### 4.1.2 OIL AND GREASE

Oil and grease separation is a structural control that is in extensive use at the SSP-IT facility. The following oil and grease separation control measures have been implemented for stormwater at the site.

- There are five oil/water separators in existence at the facility. Oil/water separators are passive, flow-through, multi-step chambers designed to separate floating product and settleable solids from the discharge stream. The oil/water separators vary in size and complexity, and are installed in discharge lines serving the following areas.
  - A coalescing plate oil/water separator is installed at Outfall 1. The drainage area served by this unit includes the site access road, the truck scales, remnant steel storage, and office parking. In addition to a sediment-retaining weir and oil-retaining baffle, this unit includes a bank of coalescing media plates designed to facilitate the removal of oils from the discharge stream.
  - o A Vortechs Stormwater Treatment System, designed to remove floating product (oil and grease), as well as settleable solids, is

installed near former outfall 2, immediately upstream of a sand filter. This drainage area immediately north of the shredder, in which bulk materials, crushed automobiles, shredder residues, and other significant materials are stored. Water collected in the former treatment systems is collected and pumped back to the shredder process water treatment system for re-use. Storm water no longer discharges through outfall 2.

- One eight-stage oil/water separator is installed at Outfall 13. The drainage area served by this unit, located on the dock immediately east of the shear, is used for staging of scrap metals which must be torch cut or otherwise dismantled either prior to, or in lieu of, being resized in the shear.
- o A coalescing plate oil/water separator is installed at Outfall 14. The drainage area served by this unit includes the site road parallel to Building B and employee parking. In addition to a sediment-retaining weir and oil-retaining baffle, this unit includes a bank of coalescing media plates designed to facilitate the removal of oils from the discharge stream.
- One eight-stage oil/water separator is installed at Outfall 15. The drainage area served by this unit, located on the dock east of the shear, is used for staging of scrap metals which must be torch cut or otherwise dismantled either prior to, or in lieu of, being resized in the shear.
- A coalescing plate oil/water separator is installed at Outfall 16. The drainage area served by this unit includes the site access road and office parking. In addition to a sediment-retaining weir and oil-retaining baffle, this unit includes a bank of coalescing media plates designed to facilitate the removal of oils from the discharge stream.
- Five single cartridge Stormwater Management StormFilters have been installed at the catch basins nearest the bay doors opening into Building B and the Mold Loft Building as shown on the site map. The devices were installed in order to address the increased risk of potential oil spills or leakage at these locations.
- Each of the five sand filters installed at the facility include pre-chambers equipped with sediment weirs and oil baffles to minimize oil-fouling of the filtration media. The sand filters are described in detail in Section 4.1.4.
- Approximately 80% of the storm drain catch basins at the SSP-IT property are designed with inverted outflow pipes to trap oil and grease in the basin.
   The outflow pipes discharge water collected in the basin from below the water surface, essentially trapping oil, grease and other floating materials

in the basin. These catch basins are located throughout the site, but are concentrated in areas of storage and operations (e.g., most of the non-grease trap basins are located along access roads and in parking areas).

- Drip pans are placed beneath vehicles and equipment that show evidence
  of potential oil or fluid leakage, and that are parked or stored for periods
  longer than one shift (eight hours).
- Small spills or releases of oil or other petroleum products are cleaned up using dry absorbents which are swept up and properly disposed upon completion of clean-up. Soils that may be impacted by small spills are removed and properly disposed. Detergents and solvents are not used to clean up spills.
- Oil/water separators are inspected on a monthly basis for buildup of sediments, grease, and related materials. The chambers are pumped out and cleaned by a licensed private wastewater contractor, as necessary.

Numerous additional oil and grease separation control measures are in use at the facility related to the shredder process water system and other non-stormwater related activities that are not described here.

#### 4.1.3 WASTE CHEMICALS AND MATERIAL DISPOSAL

Management controls related to waste chemicals and material disposal include both source control and structural control options. The following management practices related to waste chemical and material disposal have been implemented at the site:

- SSP's stringent scrap metal acceptance policy (included as Appendix A) requires that waste materials be removed from discarded items prior to acceptance.
  - Appliances must have all electrical components removed.
  - Vehicles must be drained of all fluids, including fuel, radiator and airconditioning coolants, and lubricants.
  - Lead acid batteries and mercury switches must be removed from all vehicles or equipment.
  - Compressors from appliances must be removed, drained, and cut in half.
  - Aerosol cans must be empty, and either punctured or crushed.
  - o Drums, barrels, and other containers must be thoroughly cleaned and cut open for inspection.

- Waste coolants and lubricants generated by SSP are accumulated in above ground storage tanks or drums in a covered, concrete secondary containment structure prior to periodic offsite shipment for recycling.
- Containers are properly labeled, are kept closed, and are maintained in appropriate storage areas. Any containers damaged in shipment or storage are promptly over-packed, or the contents are transferred to a sound container.
- Solvents and degreasers used in self-contained parts cleaners are periodically exchanged by an outside contractor, and waste solvents are transported offsite for recycling.
- Although uncommon, waste items delivered improperly to SSP (e.g., leadacid batteries) are temporarily stored under cover in the maintenance building pending offsite shipment for recycling or proper disposal.

#### 4.1.4 EROSION AND SEDIMENT CONTROL

The majority of the SSP-IT property (approximately 90%) is paved. Additional portions of the site are scheduled to be paved in the future. Currently unpaved areas primarily consist of narrow strips of property along the banks of the Willamette River and around the head of the ship berthing slip. Very narrow strips of unpaved area also exist along the network of railroad tracks at the site. The following measures have been implemented at the site to control sediment and erosion:

- Four sand filters have been installed to control suspended sediment discharge with stormwater along the river. These sand filters serve Outfalls 3, 4, 5, and 6/7. Each sand filter is equipped with a high flow bypass to prevent the sand filter from constricting high flow to the point of flooding the yard. As shown on the attached site map, outfalls designated with an "A" discharge treated flow, and outfalls designated with a "B" discharge the high flow bypass. An exception to these designations occurs at Outfall 7, which discharges bypass stormwater from Basin 6 though an underground oil/water separator.
- All oil/water separators at the facility are equipped with either sediment weirs or elevated discharge pipes to trap sediments in a chamber of the unit
- Accessible areas are swept using a vacuum/broom sweeper on an average of once per week.
- Vegetation (primarily indigenous grasses and blackberry) has been allowed
  to take root in unpaved areas along the water banks to reduce erosion. In
  addition, rip-rap has been historically emplaced on the slopes of the river
  bank which may be prone to erosion due to wave action.

- Straw bales, drain filters, or similar mechanisms are used to minimize the influx of sediment into stormwater catch basins and into the river, where appropriate.
- Facility-wide inspections are conducted at least once per month to identify areas of erosion, damaged pavement, and areas requiring sweeping.
- In areas where bulk material storage is conducted, drain covers may be emplaced during storage of materials which might contribute to suspended solids in stormwater run-off (e.g., fine particulates or dusty materials), as necessary.

#### 4.1.5 DEBRIS CONTROL

Considering the nature of facility operations, debris build-up is of significant concern. Although scrap recycling operations requires the accumulation of both processed and unprocessed scrap metals in stockpiles, SSP personnel strive to ensure that only designated areas are used for these stockpiles, and that all roadways, railways, parking areas, work areas, and buildings remain free of accumulated debris. The following measures have been implemented at the facility to control debris:

- Accessible areas are swept using a vacuum/broom sweeper on an average of once per week.
- Accessible areas are swept using a magnetic collector on an average of once per month.
- Trash dumpsters are placed strategically around the site to promote proper disposal of paper, wood, and other items that may be discarded during truck loading and offloading.
- Two trailer sweep-off areas are designated along the access road to the facility to allow suppliers to dispose of debris prior to exiting the site.
   Permanent three-sided bins are provided at each location to contain the debris. These bins are cleaned out on a weekly basis.
- Facility-wide inspections are conducted at least once per month to identify areas of debris build-up that need cleanup.

#### 4.1.6 STORMWATER DIVERSION

Stormwater diversion controls have been implemented at the site primarily as a means of ensuring that stormwater drainage in areas that may be prone to adverse impact is either recycled, or is directed through treatment systems (e.g., oil/water separators and sand filters) prior to discharge. The following stormwater diversion measures have been implemented at the facility:

- The area immediately surrounding the shredder (approximately three acres) is paved and provided with catch basins piped to a closed-loop collection and treatment system. This water is used for cooling and dust suppression in the shredder.
- An approximate 400 foot by 60 foot concrete slab (approximately <sup>1</sup>/<sub>2</sub> acre) located along the southern property boundary near the shredder drains through two large oil/water separators. Stormwater from this slab is pumped from the oil/water separator to the shredder for use as process water make-up.
- A small paved area south of the shear (approximately <sup>1</sup>/<sub>2</sub> acre) is served by a catch basin which is also piped to the shredder process water recycling system.
- The concrete slab underlying the hydraulic shear is served by a large sump
  which collects stormwater. The stormwater is pumped from the sump
  through two large oil/water separators (located near the dock lunchroom),
  and then flows to the shredder process water recycling system for re-use.

#### 4.1.7 COVERING ACTIVITIES

Activities and storage areas that are most prone to potentially adversely affecting stormwater quality are maintained under cover, either inside of the maintenance building, or in a roofed concrete secondary containment structure. These areas are further discussed in Section 4.1.1, above.

In addition, SSP has constructed a secondary separation system for the ASR that is completely enclosed within Building B. ASR from the shredder is loaded onto dump trucks and transferred to a large bin inside the building. A front-end loader then takes the ASR from the bin and feeds it into a hopper that delivers the material to shaker screens, separation equipment, and finally picking tables, to remove as much non-magnetic, non-ferrous metal as practical from the ASR. After passing through this system, the ASR is deposited in two large, elevated, bottom dump hoppers, that ultimately discharge the material into trucks destined for the landfill. This system results in a substantial decrease in the amount of significant materials which would be exposed to incident precipitation or stormwater run-off at the site.

Covered storage and operations areas are inspected monthly to ensure that any significant materials stored or used in the areas are being properly contained and managed.

#### 4.1.8 HOUSEKEEPING

Maintaining a clean and orderly job site is instrumental for controlling potential stormwater pollutants, as well as for ensuring a safe working environment. The following management practices related to good housekeeping are followed at the SSP-IT facility:

- Accessible areas are swept using a vacuum/broom sweeper on an average of once per week, and are swept using a magnetic collector on an average of once per month. Minimal amounts of water are used in the paved areas for dust control during dry periods.
- Trash dumpsters are placed strategically around the site to promote proper disposal of paper, wood, and other items that may be discarded during truck loading and offloading.
- Two trailer sweep-off areas are designated along the access road to the facility to allow suppliers to dispose of debris prior to exiting the site.
   Permanent three-sided bins are provided at each location to contain the debris. These bins are cleaned out on a weekly basis.
- Containers are properly labeled, are kept closed, and are maintained in appropriate storage areas. Any containers damaged in shipment or storage are promptly over-packed, or the contents are transferred to a sound container.
- Drip pans are placed beneath vehicles and equipment that exhibit evidence of potential oil or fluid leakage, and that are parked or stored for periods longer than one shift (eight hours).
- Facility-wide inspections are conducted at least once per month to identify areas needing cleanup and general policing.

#### 4.1.9 OTHER OPERATIONAL CONTROLS

Significant operational controls are in place at the facility that exceed the specific requirements of the NPDES General Permit. These controls include the following:

- Periodic community outreach events are conducted in order to elevate the awareness of scrap suppliers toward SSP's stringent scrap acceptance policies. These events include signage posted at SSP-IT, policy and guideline mailings, and visits to supplier facilities by SSP environmental and/or management personnel.
- An inbound material inspection program has been developed to minimize the potential for receipt of unacceptable materials. The program includes the following.

- Passage of every load of scrap entering the facility through a radiation detector.
- Visual screening of every load of scrap received at the facility by scalehouse personnel.
- Visual screening of all scrap materials offloaded from transport vehicles by equipment operators and ground personnel in the yard.
- Periodic thorough inspections of offloaded scrap from specific suppliers (on a rotating basis) by environmental or management personnel.

In the event that unacceptable or suspect materials are detected as a result of this program, the materials may be segregated from the scrap for proper disposal, may be returned to the supplier, or the entire load may be rejected. In any case, the supplier will be contacted and informed of the rejection, and the scrap acceptance policy will be reiterated.

#### 4.2 Spill Prevention and Response

SSP-IT maintains a written Spill Prevention, Control, and Countermeasures (SPCC) Plan, which details the specific procedures to be followed in the event of a spill or release of oil, fuel, or other petroleum product a the facility. A copy of the SPCC Plan is provided as Appendix B.

Potential causes of spills or leaks of significant materials at the facility could include container failures, equipment or vehicle leaks, and spills of shredded materials, ASR, and/or chemicals during handling or transport operations. Frequent inspections of storage, maintenance and processing areas, and inspections of vehicles and equipment are intended to identify potential problems areas, and to allow the timely detection of any spillage prior to adversely impacting the storm sewer system, or reaching surface waters.

Spill response equipment, including containment and absorbent booms, absorbent socks and pads, and related safety equipment, are maintained on-hand in spill kits placed in strategic locations throughout the site.

Spill prevention and response provisions include the following:

- Operations personnel are equipped with radios and/or cellular phones to provide immediate communication in the event of an accidental release.
- Storm drain covers are available to block catch basins in the event of a spill which has the potential to reach a drain.
- Spill kits containing absorbent pads and booms, and other cleanup and safety supplies are placed in strategic locations throughout the site.

- An adequate supply of absorbent and containment booms and similar items are available to contain and clean up any spilled materials. Spilled materials are cleaned up using dry methods whenever possible.
- Containers of liquids, including oils and other petroleum products, are stored within secondary containment, or are placed on spill containment pallets.
- Drip pans are placed beneath vehicles and equipment that exhibit evidence of potential oil or fluid leakage, and that are parked or stored for periods longer than one shift (eight hours).
- Containers are periodically inspected to ensure that they are closed, properly labeled, and in good condition.

#### 4.3 Preventive Maintenance

Preventive maintenance involves the regular inspection, cleaning and mechanical maintenance of vehicles, equipment, and stormwater management structures, as well as other activities designed to reduce the likelihood of spills and leaks. The following preventive maintenance provisions have been implemented at the SSP-IT facility:

- A vehicle and equipment inspection and maintenance program has been developed which includes the following:
- Regularly scheduled vehicle and equipment inspections focused on fluid leaks.
- Service and inspection checklists specific to each type of vehicle and major item of equipment.
- Maintenance logs detailing services performed on each vehicle and major item of equipment.
- Training requirements for personnel involved in vehicle and equipment operations, inspection, and maintenance.
- Major items of equipment that are stored or used outdoors are cleaned on a regular basis to remove accumulated oil and grease from exterior surfaces (except as necessary for proper operation).
- Vehicle and equipment maintenance is conducted within the enclosed maintenance building, to the extent possible.

During monthly site inspections, the inspector will determine whether potential pollution sources are being adequately controlled, and whether pollution controls specified in the SWPC Plan have been properly and effectively implemented. Inspections will be documented using a comprehensive Site Inspection Checklist (included as Appendix C), which will include the dates of inspection, items inspected, problems or concerns

encountered, and corrective measures implemented. The facility drainage areas described in Table 1 will be included in the inspections, and the following items will be inspected, at a minimum:

- Containment structures, booms and berms, on a monthly basis, to ensure that they are intact and functional.
- Discharges from outfalls, on at least a monthly basis when occurring, to inspect for color, foam and sheen.
- Facility-wide inspections, at least once per month, to identify areas of erosion, damaged pavement, and areas requiring sweeping.
- Oil/water separators, on a monthly basis, for buildup of sediments, grease, and related materials. The chambers are pumped out and cleaned by a licensed private wastewater contractor, as necessary.

#### 4.4 **Employee Education**

SSP has developed a comprehensive employee training program which includes practices and procedures related to stormwater management, pollution prevention, and spill control and countermeasures. Operations personnel begin their training by viewing a stormwater pollution prevention video prepared and distributed through the Institute of Scrap Recycling Industries (ISRI). Additional training is provided by the facility's environmental and safety staff, and includes the following:

- Information on the acceptability and unacceptability of certain types of scrap and other materials.
- Proper procedures for containing or otherwise isolating unacceptable materials and spills.
- Locations of spill response kits and other emergency equipment.
- Proper notification procedures.

Training is documented using Training Record forms (included as Appendix D). Training Records are maintained for each employee for a minimum of five years, and are retained at the SSP Health and Safety office in the employee personnel files.

In addition to employee training, SSP-IT strives to educate its scrap suppliers regarding scrap acceptability, both to prevent improper receipt of unacceptable materials, and to protect site stormwater from potential pollution sources. SSP-IT has a written scrap acceptance policy (included as Appendix A) which is distributed to suppliers in periodic mailings and in frequent hand-outs when entering or exiting the facility. The policy identifies specific items that cannot be accepted, as well as particular preparation requirements for other items. The policy is periodically reviewed and updated, and updates are communicated promptly to SSP's suppliers.

#### 4.5 Recordkeeping and Internal Reporting Procedures

Records of site inspections are maintained using a comprehensive Site Inspection Checklist (included as Appendix C). This checklist provides a means for documenting the dates of inspection, items inspected, problems or concerns encountered, and corrective measures implemented.

Site Inspection Checklists, stormwater monitoring results, records of spills and associated corrective action, and preventive maintenance records will be retained on file by SSP for a minimum of five years.

Stormwater monitoring results will be tabulated and submitted in a report to DEQ's Northwest Region by July 15<sup>th</sup> of each year. Other relevant records will be made available to authorized representatives of the DEQ upon request.

#### 4.6 Plan Review and Revision Requirements

Based on the results of monthly site inspections detailed previously, the SSP-IT facility will periodically assess the overall effectiveness of this SWPC Plan, and will implement modifications or improvements to the plan, as appropriate. The periodic plan assessment will include the following:

- The site map will be modified or updated to reflect current facility conditions.
- Identified potential stormwater pollution sources will be visually inspected to determine if they are being adequately and effectively controlled.
- Pollution control structures will be evaluated to determine if they have been properly installed, and to assess their effectiveness.
- Pollution control measures will be evaluated to determine if they have been properly implemented, and to assess their effectiveness.
- Spill response equipment and supplies will be inspected to ensure proper operation and adequate supply.

In addition, the SWPC Plan will be reviewed within 30 days of receipt of any sampling results demonstrating that effluent benchmarks specified in the NPDES General Permit have not been met. The purpose of this review will be to determine if the SWPC Plan has been properly and effectively implemented, and to identify any additional technically feasible and economical site controls that may be implemented to further improve the quality of stormwater discharges.

#### 5.0 MONITORING PROGRAM

In compliance with the NPDES General Permit, stormwater samples will be collected from the active discharge outfalls serving the facility four times each year, if possible. Two events will occur prior to December 31<sup>st</sup> and two will occur after January 1<sup>st</sup>. The events will be conducted no less than 14 days apart.

Monitoring for the purposes of this SWPC Plan will not include Outfalls 2, 11 and 17, since these outfalls are not currently connected to any catch basins and/or do not discharge stormwater. Also, Outfall 18 will not be included for monitoring under this plan, since it is sampled monthly by a neighboring facility as part of a separate NPDES Individual Permit.

SSP may elect to reduce the number of actual monitoring points at the facility based on site operations and specific activities conducted within the drainage areas, in accordance with NPDES General Permit Condition B.1(c). Discharges from multiple outfalls serving drainage areas representing similar activities, and where discharges are expected to be of similar composition, may be represented by a single monitoring point. In addition, outfalls serving areas with no exposure of stormwater to industrial activities will not require monitoring.

Visual monitoring at all outfalls and at areas of potential pollutant contact is required during at least one storm event per month during the rainy season (approximately October through April) that results in at least one hour of continuous discharge. In addition, visual monitoring at each outfall is required at least twice during the dry season (approximately May through September). These visual monitoring requirements will be met through monthly site inspections conducted as described in Section 4.0.

Collected stormwater samples must be representative of the discharge from the facility, and will be analyzed in accordance with the approved methods specified in 40 CFR 136.

Stormwater samples collected during the sampling events will be delivered to a laboratory for analysis for the parameters required by the NPDES General Permit, as summarized in Table 3.

Table 3: Stormwater Sample Analytical Requirements					
PARAMETER ANALYTICAL METHOD   EFFLUENT BENCHMARK					
Total Copper	EPA 6010B	0.1 mg/l			
Total lead	EPA 7421	0.4 mg/l			
Total Zinc	EPA 6010B	0.6 mg/l			
рН	EPA 150.1	5.5 to 9.0 s.u.			
Total Suspended Solids (TSS)	EPA 160.2	130 mg/l			
Oil & Grease	EPA 413.1	10 mg/l			
Floating Solids (associated with industrial activities)	Visual Observation	No Visible Discharge			
Oil & Grease Sheen	Visual Observation	No Visible Sheen			

The results of stormwater sample analyses will be tabulated and submitted to the DEQ's Northwest Region by July 15<sup>th</sup> for the preceding reporting period (July 1<sup>st</sup> through June 30<sup>th</sup>).

In the event that stormwater monitoring results indicate that a pollutant parameter for which the receiving water is water quality limited is being discharged in significant concentrations, a waste load allocation may be added to the permit conditions by the DEQ.

In the event that stormwater monitoring results indicate that a pollutant parameter is being discharged at a concentration that may be a threat to the water quality of the receiving stream, additional effluent limits may be added to the permit conditions by the DEQ.

Sample analytical results and periodic visual inspection observations will be evaluated by SSP-IT's Stormwater Pollution Prevention Team during periodic SWPC Plan effectiveness assessments to determine if modified or additional stormwater management practices and/or structural controls are warranted. The SWPC Plan will be revised as appropriate, and employees will be properly trained as necessary.

#### 6.0 IMPLEMENTATION SCHEDULE

Revision of the facility's SWPC Plan will be conducted in accordance with schedules provided in the NPDES General Permit 1200-Z, as applicable.

Site controls determined to be warranted based on SWPC Plan review (as described in Section 4.6) will be implemented in a timely manner, and will be incorporated into the SWPC Plan as an update.

#### 7.0 ADDITIONAL PERMIT REQUIREMENTS

#### 7.1 <u>Waste Disposal Wells</u>

Oregon Administrative Rule (OAR) 340-44-50 provides specific requirements for the use of waste disposal wells for stormwater drainage. The SSP-IT facility does not use waste disposal wells for stormwater drainage.

#### 7.2 Surface Water Temperature Management Plan

Individual stormwater dischargers are not expected to cause a measurable increase in stream temperature. Compliance with the NPDES General Permit meets the requirement of OAR 340-41-26(3)(a)(D) to develop and implement a surface water temperature management plan. However, in the event that the Total Maximum Daily Load (TMDL) for temperature is being exceeded by stormwater dischargers in a specific river basin, additional management practices to reduce the temperature of discharges may be required. Such management practices may include increasing vegetation to provide shading, construction of underground conveyance systems or detention structures, or installation of filtration devices to reduce above-ground detention times.

In the event that additional temperature management controls are required by the DEQ, SSP-IT will revise the SWPC Plan to include management practices focused on reducing discharge temperatures, as necessary.

#### 7.3 Specific River Basin Requirements

The SSP-IT facility lies within the Willamette River Basin. Water quality standards for the Willamette River Basin are provided in OAR 340-041-0442 through OAR 340-041-0470.

In general, the effluent benchmarks specified in NPDES General Permit 1200-Z are expected to meet the water quality requirements for the Willamette River Basin. However, in some cases, monitoring requirements of the General Permit are not directly applicable for demonstrating compliance with Willamette Basin water quality standards. For example, based on the requirements of OAR 340-041-0445(2)(c), no more than a 10% cumulative increase in natural stream turbidities is allowed for a discharger, as measured relative to a control point immediately upstream of the turbidity causing activity. However, the NPDES General Permit does not require monitoring for turbidity, but for total suspended solids (TSS). Although the benchmark for TSS is expected to be protective of the turbidity standard, no direct correlation between the two measurements has been determined.

The DEQ is currently addressing this situation by modifying the NPDES General Permits for specific watersheds. In the event that additional monitoring or management controls are required by the modified permits (provided they apply to the SSP-IT facility), SSP-IT will revise the SWPC Plan to include those monitoring requirements and management practices, as necessary.

#### 8.0 PLAN APPROVAL AND CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature

12.20-06

Date

Jim Goodrich

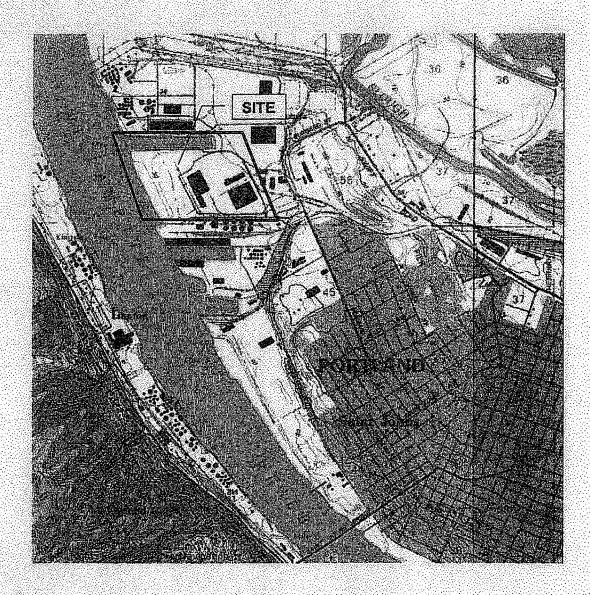
General Manager

Schnitzer Steel Products Co.

#### **FIGURES**

SSP Stormwater Pollution Control Plan

December 2006





## SCHNITZER STEEL PRODUCTS CO. Portland, Oregon

Figure 1: Site Location Map

## APPENDIX A SCRAP ACCEPTANCE POLICY

# SCRAP ACCEPTANCE GUIDELINES



# SCHNITZER STEEL PRODUCTS CO.

12005 N BURGARD RD. PO BOX 10047 PORTLAND, OR 97296-0047

> 503-286-5771 FAX 503-286-6948

> > SCHN00245316



#### Dear Customers:

This brochure clarifies our policies for accepting recyclable metals. These requirements reflect our commitment to responsible environmental management. Please be aware that many of our policies are controlled by state and federal environmental regulations which apply both to us and to our customers.

This list is not inclusive; other items not listed may be inappropriate for recycling as scrap metal. Please read this brochure carefully, and contact us at 503/286-5771 if you have questions about specific items. Remember that any load may be rejected at your cost if these guidelines are not followed.

# The following materials will NOT be accepted at our facility:

- Refrigerants (including CFCs and HCFCs) in refrigerators and air conditioners. Please note that Clean Air Act regulations (§608(b)(1) and §608(c)) prohibit any release of refrigerants to the atmosphere, and require persons handling refrigerants to follow specific procedures. Our customers are REQUIRED to sign a statement certifying that all refrigerants have been properly removed (40 CFR §82).
- Asbestos or asbestos containing materials, such as pipe insulation and surfacing material commonly found on I-beams, tanks, and other structural

- and demolition debris (40 CFR §61.150).
- Oils, gasoline, other petroleum products and antifreeze. This includes hydraulic flulds, gear oils and grease. Hydraulic equipment must have hydraulic hoses removed and cylinders cut open and drained.
- Lead-acid batteries or battery parts, including automobile batteries (40 CFR \$273).
- Items that contain or have contained PCBs; including small capacitors, fluorescent light ballasts and electrical transformers or transformer components (TSCA and 40 CFR §258 and §261).
- Automobile airbags, which contain sodium azide (40 CFR §261).
- > Paint cans or other paint containers.
- Acetylene bottles and other sealed containers. Sealed containers are described as air or water tight containers without visible openings.
- Fluorescent lights, neon, high intensity or mercury vapor lights.
- Any material containing hazardous or toxic substances.
- Military scrap of any kind, unless approved in advance.
- > Explosives or explosive residues.
- > Radioactive materials of any kind.

- Tires, wood, dirt, yard debris, concrete, asphalt, glass, rubber, or other nonmetallic materials.
- The following items will be accepted ONLY if prepared as described:
- Appliances: ALL electrical components and compressors must be removed.
- Automobiles: ALL fluids, Including refrigerants, must be drained. Tires, batteries, lead wheel weights, mercury switches, and undeployed air bags must be removed.
- Air conditioning compressors: MUST be removed from item, cut in half, and drained.
- Drums, barrels and other containers: MUST be thoroughly cleaned and open for inspection.
- Gas cylinders, including air bottles, shock absorbers, and propane and other gas tanks, must be cut in half or have a hole to allow inspection.
- Cable and wire: MUST be cut in 3-foot lengths, or coiled and banded with 3/4inch steel banding in at least four places
- Metal banding: MUST be cut in 1-foot lengths.
- Chain-link fencing: MUST be cut in sections no larger than 18 feet by 4 feet.
- Aerosol cans: MUST be empty and crushed or punctured. Plastic caps must be removed.

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# APPENDIX B SPILL PREVENTION, CONTROL, AND COUNTERMEASURES (SPCC) PLAN

# SPILL PREVENTION CONTROL & COUNTERMEASURE (SPCC) PLAN

Schnitzer Steel Industries, Inc. International Terminals 12005 N. Burgard Street Portland, Oregon 97203

**Emergency Contacts:** 

Mat Cusma Telephone Number: (503) 286-6944 Jim Jakubiak Telephone Number: (503) 286-6976

# Prepared for:

Schnitzer Steel Industries, Inc. 3200 NW Yeon Ave Portland, OR 97210 Attn: Mathew Cusma

# Prepared by:

TRT Engineering, Inc. 2636 SE Market St Portland, OR 97214 (503) 235-7592

December 2006

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#### SPCC PLAN ADMINISTRATION

#### Information Summary, Designated Person and Management Approval 1.1

This SPCC Plan for the facility referenced below complies with the requirements of 40 CFR Part 112. The goal of the SPCC regulation is to prepare and implement a plan that will prevent the discharge of oil (defined in 40 CFR Part 112.2 as oil of any kind or in any form, including, but not limited to petroleum, fuel oil, sludge, oil refuse and oil mixed with wastes other than dredged spoil) in harmful quantities from a facility into or upon navigable waters of the United States or adjoining shorelines.

Following is a summary of information regarding the facility for which this SPCC Plan is prepared, as well identification of the designated person responsible for oil spill prevention and a statement of management approval.

**Facility Operator** 

Name/Site Address:

Schnitzer Steel Industries – International Terminals

12005 N Burgard St Portland, Oregon

Section, Township, Range: S. 35, T. 2N., R. 1W. of Willamette Meridian

Geographic Coordinates:

Lat. 45°, 36' 38.5", Long. 122°, 46', 37.2"

County:

Multnomah

**Property Owner:** 

Schnitzer Steel Industries, Inc.

**Facility Contact:** 

Mathew Cusma, Environmental Administrator

Telephone: (503) 286-6944

Type of Facility:

Scrap metal collection and processing

Date of Initial Operation:

1941

**Designated Person** Responsible for Oil\*

Spill Prevention:

Mathew Cusma

Waterway Potentially

Impacted by Release:

Willamette River

Discharge Pathway:

Storm sewer discharge 500 feet west

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Management Approval:

This SPCC Plan will be implemented as herein described. The plan will be reviewed and updated every five years, or when significant changes to site oil-handling facilities or procedures occur.

Mathew Cusma, Environmental Administrator

# 1.2 Professional Engineer Certification

P.E. Certification:

I hereby certify that I am familiar with the facility and the provisions of 40 CFR, Part 112 (i.e., SPCC Rule), and attest that this SPCC Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards, and with the requirements of the SPCC Rule.

Timothy R. Turner, P.E.

TRT Engineering, Inc.

12/24/06

Date

Schnitzer Steel Industries, Inc. 12005 N Burgard St/Portland, OR

#### 1.3 Location of SPCC Plan

In accordance with 40 CFR 112.3(e), a copy of this SPCC Plan will be available for review at the on-site environmental office during regular business hours.

#### 1.4 Plan Review

#### 1.4.1 Changes in Facility Configuration

In accordance with 40 CFR 112.5(a), Schnitzer Steel periodically reviews and evaluates this SPCC Plan for changes in facility design, construction, operation or maintenance that may materially affect the facility's potential for an oil discharge, including, but not limited to:

- ♦ Installation of ASTs or containers above 1,320 gallons in capacity;
- Reconstruction, replacement or installation of piping systems;
- Construction or demolition that might alter secondary containment structures; or
- Changes in products, services or operations (including modification of testing and/or inspection procedures) and use of new or modified industry standards or maintenance procedures.

Amendments to the SPCC Plan made to address the above-described modifications are considered "technical amendments" and must be certified by a P.E. Non-technical amendments can be completed (and must be documented in the SPCC Plan) by the facility owner and/or operator. Non-technical amendments include the following:

- ◆ Change in contact name or other information for individuals responsible for SPCC Plan implementation; or
- Change in the name or contact information of spill response or cleanup contractors.

Schnitzer Steel must make the necessary revisions to the SPCC Plan not later than six months after the change(s) occurs. The SPCC Plan must be implemented as soon as possible following technical amendments, but not later than six months from the date of the amendment.

#### 1.4.2 Scheduled Plan Reviews

In accordance with 40 CFR 112.5(b), Schnitzer Steel reviews this SPCC Plan at least once every five years. Revisions to the SPCC Plan, if necessary, are made within six months of the five-year review. A registered P.E. certifies technical amendments to the Plan, as described above, in accordance with 40 CFR 112.3(d). This SPCC Plan is dated December 2006 and the next Plan review will take place on or before December 2011.

#### 1.4.3 Record of Plan Reviews

Scheduled reviews and Plan amendments are recorded in the Plan Review Log (Table 1-1). This log must be completed even if no amendment is made to the Plan as a result of the review. Unless a technical or administrative change prompts an earlier review of the SPCC Plan, the next scheduled review of this Plan will occur by 2011.

# 1.5 Facilities, Procedures, Methods or Equipment Not Yet Fully Operational

Bulk storage containers at this facility have not been tested for integrity since their installation. However, all storage tanks are above ground and the maximum storage capacity of the largest tank is 500 gallons and all tanks are located within secondary spill containment. Therefore, no integrity testing other than visual inspections are recommended for this site. Section 4.2.6 of this SPCC Plan describes the inspection program to be implemented by the facility following a regular schedule but does not include dates for bulk storage container testing.

#### 1.6 Cross-references with SPCC Provisions

This SPCC Plan does not follow the exact order presented in 40 CFR Part 112. Section headings identify, where appropriate, the relevant sections of the SPCC Rule. Table 1-2 presents a cross-reference of SPCC Plan sections relative to applicable parts of 40 CFR Part 112.

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#### 2.0 FACILITY INFORMATION

The goal of the SPCC regulation is to prepare and implement a plan that will prevent the discharge of oil (defined in 40 CFR Part 112.2 as oil of any kind or in any form, including, but not limited to petroleum, fuel oil, sludge, oil refuse and oil mixed with wastes other than dredged spoil) in harmful quantities from a facility into or upon navigable waters of the United States or adjoining shorelines. The following sections include a description of the International Terminals facility, information regarding onsite tanks and containers, and a discussion of discharge prevention measures.

## 2.1 Facility Description and Layout

The International Terminals property is located at 12005 N. Burgard Street, Portland, Oregon. A General Location Map for the facility is presented in Figure 1; the Site Plan is in Figure 2.

The site occupies approximately 3,500 lineal feet (0.66 miles) of riverbank along the eastside of the Willamette River. The ground surface at the site gently slopes to the north/northwest with elevations on the order of 30 feet above mean sea level (MSL). According to water well logs on file at the Oregon Water Resource Department, the general subsurface description for International Terminals fluvial deposits of sand and gravel up to approximately 175 feet below ground surface. Groundwater is unconfined to the Troutdale Formation, at depth.

Two different operations occur at the site. Schnitzer Steel Industries manages a scrap metal processing operation. Bulk quantities of scrap metal are shredded and/or sheared into small pieces of metal for shipment to offsite metal recycling facilities. International Terminals operates a transfer operation onsite, including bulk cargo handling from the shipping/port area located onsite. Oil products are currently stored in bulk quantities throughout the site. Table 2-1 identifies the current storage type and size and the location is shown on the Site Plan (Figure 2).

Based on review of the United States Geological Survey (USGS) topographic map "Linnton, Oregon", the site is located approximately 30 feet above mean sea level (amsl). Topography at and in the vicinity of the site generally slopes from east to west toward the Willamette River.

The scope of this SPCC Plan addresses the current onsite ASTs, storage containers and fuel delivery activities. The locations of onsite ASTs and pertinent site features are presented on Figure 2. Material Safety Data Sheets (MSDS) for new product materials are maintained on-site.

# 2.2 Tank Information

There is one lube oil AST, three motor oil ASTs, four hydraulic fluid ASTs, nine dielectric fluid ASTs and two waste oil ASTs at the facility as listed in Table 1, "Significant Materials Storage."

The majority of the ASTs are single-walled tanks located within a secondary containment area at the northeast corner of Building B. There are single, large hydraulic fluid ASTs located at the shear and shredder. Piping associated with the hydraulic fluid ASTs are inside buildings.

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There are two electric rooms in Building B each containing three transformers filled with dielectric fluid.

There no diesel or gasoline tanks on the site. Vehicle refueling is done at an adjacent fuel island.

#### 2.3 Container Information

Various grades of oil and related products (e.g., transmission fluid, antifreeze, hydraulic fluid, etc.) are stored in 55-gallon and 30-gallon drums at the Building B and shredder maintenance areas and in the shear building.

# 2.4 Discharge Prevention Measures

Detailed information on discharge prevention measures is included in Section 4.0 of this SPCC Plan.

## 2.5 Discharge and Drainage Controls

Detailed information on discharge and drainage controls is provided in Section 4.0 of this SPCC Plan.

# 2.6 Countermeasures for Discharge Discovery, Response and Cleanup

Detailed information on countermeasures for discharge discovery, response and cleanup is included in Sections 6 and 7 of this SPCC Plan.

#### 2.7 Disposal Methods for Recovered Materials

Detailed information on disposal methods for recovered materials is included in Sections 6 and 7 of this SPCC Plan.

#### 2.8 Contact Information

Contact information for appropriate site representatives and regulatory agencies is included in Appendix C of this SPCC Plan.

# 2.9 Discharge Reporting Information

Spill incidents that may occur in the future will be managed as described in Section 6 and Section 7 of this SPCC Plan. Additionally, onsite spill incidents that may occur will be recorded on the "Spill Record Form" attached in Appendix A. Completed Spill Record forms will be maintained as part of this SPCC Plan for a minimum of three years.

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# 2.10 Evaluation of Discharge Potential

The facility is located on a parcel of land that slopes from east to west toward the Willamette River. The anticipated direction of flow of potential onsite spills will be to through the storm drainage system to the Willamette River. There are several storm drainage outfalls from the International Terminals site to the Willamette River (see Figure 2).

Approximately 70 percent of the facility is paved with asphalt, concrete and/or covered with buildings. The remainder of the site consists of pervious surfaces (e.g., gravel, vegetation, etc.).

# 2.2.1 Distance to Navigable Waters and Flow Directions

Materials discharged off the facility likely would flow west into the Willamette River located along the western property boundaries.

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#### 3.0 DISCHARGE PREVENTION – GENERAL SPCC PROVISIONS

Following is a description of measures implemented at the Schnitzer Steel facility to prevent oil discharges during handling, use or transfer of oil products at the facility.

# 3.1 Compliance with Applicable Requirements

This SPCC Plan is in compliance with applicable regulations in 40 CFR 112.7

# 3.2 Spill Reporting

Reporting and cleanup of spills and releases pertaining to oil and/or hazardous materials is regulated by the U.S. EPA and under Oregon Administrative Rules (OAR) 340-108-001 through 340-108-080. Spills and releases that meet or exceed the reportable quantity requirements in a 24-hour period must be reported to the National Response Center and the Oregon Emergency Management Division (see Section 8 of this SPCC Plan) of the Oregon Department of Environmental Quality (DEQ).

Spill incidents that may occur in the future will be managed as described in Section 5.0 of this SPCC Plan. Additionally, onsite spill incidents that may occur will be recorded on the "Discharge Notification Form" attached in Appendix B. Completed Spill Record forms will be maintained as part of this SPCC Plan for a minimum of three years.

# 3.3 Potential Discharge Volumes and Direction of Flow

Potential oil spill sources, spill causes and spill quantities for the facility are identified in Table 2. Potential spill causes include overfilling, leakage or rupture of one or more of the ASTs, broken hose or equipment failure during transfer to the ASTs, a fuel supply truck tank leak, and a release from a vehicular accident.

Based on information obtained during completion of the SPCC Plan for the facility, the anticipated direction of flow of potential onsite spills will vary depending on the spill size and location. Potential pollutants are discussed below in relation to the areas of oil product storage, transfer and/or handling at the facility.

#### Building B ASTs

Because of the concentration of ASTs the area at the northeast corner of Building B is the area of highest potential for surface releases. The releases would likely be associated with spills during fluid transfer from delivery vehicles or tank rupture. Spills from tanks ruptures would likely to be limited to the containment structure under the ASTs.

Spills in other outdoor areas would likely drain to the site's storm drainage system. The system includes oil-trapping catch basins connected to piped outfalls to the Willamette River. The majority of the stormwater runoff is routed through treatment facilities prior the release to the

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river. The treatment facilities include sedimentation manholes, coalescing plate oil/water separators and sand filters.

#### Shear Hydraulic Fluid AST

The 5,000-gallon hydraulic fluid tank is located within the shear building. The tank is a reservoir for fluid pumped to various parts of the shear mechanism. The tank is contained within a concrete containment area.

#### Shear Electrical Transformer

The shear electrical transformers are located approximately 100 feet southeast of the shear. Because the transformer dielectric fluid in contained entirely within the transformer housing the potential for spillage is low.

# Shredder Hydraulic Fluid AST

The 300-gallon hydraulic fluid tank is located within the shredder building. The tank is a reservoir for fluid pumped to various part of the shredder mechanism. The tank is located inside shredder building area.

## Shredder Electrical Transformer

The shredder electrical transformers are located within a secondary containment structure. As with the shear, the transformer dielectric fluid in contained entirely within the transformer housing.

#### 3.4 Containment and Diversionary Structures

Methods of secondary containment at the facility include a poured concrete secondary containment unit and spill response materials to prevent oil from reaching navigable waters and adjoining shorelines. Secondary containment is discussed below in relation to the areas of petroleum product storage, transfer and/or handling at the facility. Secondary containment capacity calculations are included in Appendix C.

#### AST Tank Area

The onsite ASTs are located within a containment area with concrete walls and floor that has sufficient volume to contain a release from the largest AST (500 gallons) plus 10 percent freeboard as indicated in Appendix C.

#### Loading/Unloading Rack Area

The Schnitzer Steel facility has a loading rack (for loading moderate capacity oil deliver trucks) and an unloading rack (for unloading oil products from large capacity tanker trucks to the bulk storage ASTs). Deliveries are made by contract oil supply companies.

At the time of this report the unloading area does not have secondary containment in place to contain a release from the largest compartment (i.e., 1,050 gallons) of the delivery trucks plus 10 percent freeboard. Any spills during the unloading process likely could be contained within the unloading area with use of absorbent material. Runoff not contained would drain through a stormwater treatment system and an oil/water separator before off-site discharge.

## 3.5 Practicability of Secondary Containment

Schnitzer Steel has determined that secondary containment is practicable at this facility.

# 3.6 Inspections, Tests and Records

This SPCC Plan includes the preparation of an inspection program at the Schnitzer Steel facility that incorporates the following.

- ♦ A Schnitzer employee completes a visual inspection of oil handling equipment and storage areas during business day to look for leaks, spills, damaged or malfunctioning equipment.
- Monthly Facility Inspection Checklist (see Appendix D) The checklist provides a written monthly record of visual inspections on the AST-associated equipment located onsite. Completed monthly inspection checklists are signed by the Environmental Administrator and maintained with this SPCC Plan for a minimum of three years.
- Equipment that appears worn or damaged will be documented and reported to the designated person responsible for oil spill prevention. The worn/damaged equipment will be repaired or replaced as soon as is practicable. Conditions observed that pose a potential imminent spill threat will either be corrected immediately or facility operations will be shut down until corrective actions are implemented.

# 3.7 Personnel Training on Discharge Prevention Procedures

Mathew Cusma, environmental administrator of Schnitzer Steel is the facility designee responsible for oil discharge prevention, control and response preparedness activities at this facility.

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Schnitzer Steel will implement the following training program.

- Initial SPCC Plan training will be conducted for appropriate Schnitzer Steel personnel (i.e., those employees whose job responsibilities may include handling oil products). The training will include review of:
  - the SPCC Plan and its location/availability on the facility;
  - storage locations of various spill response materials, switches and emergency equipment (e.g., fire extinguishers, shut off switches, etc.);
  - ♦ the Schnitzer Steel Spill Contingency Procedures (for those employees involved in loading/offloading operations) and related emergency information (see Appendix E); and appropriate emergency spill response procedures as identified in this SPCC Plan.
- ◆ Refresher SPCC Plan training will be conducted on an annual basis for appropriate Schnitzer Steel personnel.
- ◆ Prior to assuming their responsibilities, new Schnitzer Steel personnel (i.e., those employees whose job responsibilities may include handling oil products) will receive initial SPCC Plan training.
- When appropriate, additional briefings will be held for appropriate Schnitzer Steel personnel to:
  - ensure that employees have an adequate understanding of the SPCC Plan;
  - review any spill events, spill response procedures performed, and actions taken to prevent similar spill events from re-occurring;
  - or review updated and/or modified spill prevention measures and/or equipment; and
  - ◊ review 'substantial' modifications to this SPCC Plan.

Records of discharge prevention briefings and personnel training associated with oil spill prevention are included in Appendix F.

#### 3.8 Security

The Schnitzer Steel facility has security fencing around the property perimeter and access is limited to two gates. Security checks are required at both gates.

The facility has lighting located at the both entrance gates and internally adjacent to all buildings.

#### 3.9 Delivery Truck Unloading Requirements

There is potential for discharges during deliver tanker truck unloading procedures. The following measures have been implemented to prevent oil discharges during tank truck loading and unloading operations.

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Oil products are transferred in accordance with written Schnitzer Steel product transfer procedures (see Table 3-3). Onsite ASTs and delivery trucks are filled as needed with oil products by Schnitzer Steel. In both cases (i.e., loading of transport trucks and loading of ASTs), delivery truck drivers must remain at the pump during filling operations.

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# 4.0 DISCHARGE PREVENTION – SPCC PROVISIONS FOR ONSHORE FACILITIES

The following sections include details pertaining to drainage, bulk storage containers, transfer operations, pumping and in-plant processes at the Schnitzer Steel facility.

# 5.4 Facility Drainage

Secondary containment at the tank storage area prevents spill discharge to the storm drainage system. The contents of the secondary containment unit are visually inspected by Schnitzer personnel prior to draining to ensure that only oil-free water is allowed to leave the facility.

## 4.2 Storage Containers

**Building B ASTs** 

Concrete protective barriers surround the ASTs located outside the northeast corner of Building B. The ASTs are located within a concrete containment and is covered with a roof overhang. An oil spill kit has been placed within approximately 20 feet of this AST containment. There are approximately 2,500 gallons of oil products stored in six ASTs at this location, as well as numerous drums of oil products. The capacity of the containment is approximately 1,683 gallons. The local ground surface slopes to the north, towards a stormwater catch basin located approximately 45 feet north. In the event of a spill outside the containment area, fluids will likely remain within the immediate area of the tank for cleanup with the nearby spill kit.

# **Building B Transformers**

Both transformer locations within Building B have been protected with secondary containment, in the form of concrete-block structures built around the dielectric vessels. The transformers have each been set on a concrete pad, of which there is no apparent deterioration. In the event of a spill, all materials will likely remain within the immediate area of the vessels. There are no catch basins or floor drains within the immediate vicinity.

#### Shear

Within the Shear building there are two oil-containing vessels. The shear pump reservoir contains approximately 4,500 gallons of hydraulic oil. Around the reservoir is a secondary containment weir and sump trench to catch leaking oil. According to International Terminal staff, this sump is pumped out as necessary by an environmental contractor and disposed offsite. The capacity of this sump is approximately 2,900 gallons. Near the reservoir is reserve oil AST of 250 gallons. Facility staff utilizes a spill pan when operating this tank. On the roof of the Shear building is a 480 gallon reserve oil tank.

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The Shear building resides on an elevated concrete pad and has sheet metal walls. The ground around the Shear building is a combination of asphalt and native soils, and slopes towards the west. A significant spill from any of the oil-containing vessels at the Shear building would be expected to collect at the west side of the Shear. A sump at this location would collect the material and transfer it to the closed-loop shredder process water system.

#### Shear Transformer

The Shear Transformer is located directly south of the shear. The surrounding area is asphalt, and the transformer is mounted on a concrete pad. The immediate area slopes towards a stormwater catch basin located approximately 30 feet west of the transformer. A spill of dielectric fluid from the transformer is expected to be insignificant, with minimal potential for contact with nearby surface waters.

#### Shredder

A 1,000 gallon transformer is located on the north side of the shredder building. The transformer is mounted on a concrete pad, and protected by a chain link fence. There are no stormwater catch basins or floor drains within the immediate vicinity. An oil spill kit is located approximately 150 feet south of the transformer. The ground surface near this transformer is a combination of impervious surface (concrete) and native soil. A spill of dielectric fluid would be expected to remain within the immediate vicinity of the transformer, and possibly permeate into the native soil.

Within the shredder building is a 305 gallon AST, containing pump hydraulic oil. Near the shredder is a maintenance shed, containing 2-55 gallon drums of motor oil.

Any spills in and around the shredder building not collected with spill kits would drain to the shredder process water treatment system.

#### Shredder Transformers

At the southwest corner of the International Terminals property are three (3) transformers. According to International Terminals documentation, each of these transformers holds 2,165 gallons of dielectric fluid. The transformers have been mounted on concrete pads. Secondary containment curbing and a sump have been constructed to contain any spills. A manually operated pump rests in the sump and is operated only to remove contained stormwater. The capacity of the secondary containment curbing is approximately 13,466 gallons. A spill of dielectric fluid from these transformers would be adequately detained by the existing secondary containment.

Details pertaining to bulk oil containers at the Schnitzer Steel facility are described in Table 2-1.

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#### 4.2.1 Container Construction

Oil ASTs at the Schnitzer Steel facility are constructed of steel in accordance with industry specifications. The design and construction of bulk storage containers at this facility are compatible with the characteristics of the oil products they contain, and with temperature and pressure conditions.

Piping between fixed aboveground bulk storage ASTs is constructed of steel and situated aboveground on appropriate supports designed to minimize erosion and stress.

## 4.2.2 Secondary Containment

As described in Section 3.4 of this Plan, the onsite ASTs are located within a secondary containment area that appears sufficient to contain a release from the largest AST (500 gallons) plus 10 percent freeboard. The condition of the secondary containment is visually assessed during the monthly inspection to detect evidence of structural integrity problems.

Drums of oil products are located on the concrete floor of the maintenance building (Building B). In the event of a release associated with one of the 55-gallon drums, oil product likely would remain in the warehouse and would be contained with available spill response supplies.

#### 5.4.1 Corrosion Protection

There are no USTs at the Schnitzer Steel facility and, thus, this provision of the SPCC Rule does not apply to the facility.

#### 4.2.5 Partially Buried and Bunkered Storage Tanks

There are no partially buried or bunkered storage tanks at the Schnitzer Steel facility and, thus, this provision of the SPCC Rule does not apply to the facility.

# 4.2.6 Inspections and Tests

As described in Section 3.6, this SPCC Plan includes the preparation of an inspection program at the Schnitzer Steel facility that incorporates periodic visual inspections of the ASTs. Completed monthly inspection checklists are signed by the Environmental Administrator and maintained with this SPCC Plan for a minimum of three years.

#### 4.2.7 Heating Coils

The onsite ASTs and other bulk oil storage containers do not have internal heating coils and, thus, this provision of the SPCC Rule does not apply to the facility.

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## 4.2.8 Overfill Protection Systems

Onsite ASTs do not have overfill prevention systems. Adequate secondary containment, however, is provided in the event of an overfill incident.

#### 4.2.9 Effluent Treatment Facilities

The facility's storm water discharge is routed through one or more of the following treatment facilities; oil/water separator, sand filters and manufactured treatment unit prior to discharge to the Willamette River.

# 4.2.10 Visible Discharges

Visible discharges of oil products from onsite ASTs, bulk oil storage containers or associated equipment are quickly corrected by Schnitzer Steel personnel upon discovery.

# 4.2.11 Mobile and Portable Containers

The Schnitzer Steel facility has no mobile ASTs onsite. Small portable oil containers (e.g., 55-gallon drums) are stored in the maintenance building.

# 4.3 Transfer Operations

Transfer operations at the Schnitzer Steel facility are limited to transfer of oil products from delivery trucks to ASTs and occasional unloading during maintenance of the shredder transformers.

Aboveground piping and valves are examined monthly to assess their condition. Inspection includes aboveground valves, piping, expansion joints, catch pans, pipeline supports and valves locks. Observations are noted on the monthly inspection checklist provided in Appendix D.

Warning signs and/or barriers are mounted at appropriate location throughout the facility to prevent vehicles from damaging aboveground piping and associated equipment. The majority of aboveground piping is located in areas (e.g., within secondary containment units) that are not accessible to vehicle traffic.

#### 4.4 Integrity Testing

The site's ASTs were installed so that visual inspection on all sides is possible. Any leaks would be noticed during the scheduled inspections. Based on this information and in accordance with the U.S. EPA guidance policy pertaining to integrity testing of ASTs, it appears tank design criteria at the facility reduces corrosion potential and provides environmental protection equivalent to that provided by visual inspection plus another form of integrity testing.

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# 4.5 Security

- Security fencing surrounds the facility, except where site is bordered by the river.
- Sufficient lighting exists at the facility.

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#### 5.0 DISCHARGE RESPONSE

The following sections include a discussion of response and cleanup procedures at the Schnitzer Steel facility in the event of an oil discharge.

# 5.1 Response to a Minor Discharge

A "minor" discharge of oil is defined as one that poses no significant harm or threat to human health and safety or to the environment. Minor discharges generally include those in which:

- the quantity of oil product discharged is small (e.g., may involve less than 20 gallons of oil);
- discharged material is easily stopped and controlled at the time of the discharge;
- discharged material is localized near the source of the spill;
- discharged material is not likely to reach water;
- there is little risk to human health and safety, and
- ♦ there is little risk of fire or explosion.

If a minor discharge of oil products associated with onsite ASTs, containers or fleet vehicles occurs (e.g., due to leakage, transfer operations, equipment failure, etc.), attending Schnitzer Steel personnel will perform the following.

- Immediately shut down transfer operations (in the case of transfer operations to the AST, this procedure will be coordinated with product delivery personnel) and determine potential fire/explosion hazard. If hazard is immediate, evacuate facility and notify appropriate emergency agencies.
- 2) Close valves and/or caps on the AST, container, delivery truck tank and/or vehicle being filled.
- 3) Shut down the pumps.
- 4) Place absorbent pads and/or socks in the path of the spill and the affected drainage area.
- 5) Secure absorbent pads, socks, etc. with absorbent material.
- 6) Notify the primary Schnitzer Steel contact identified in Appendix E of this SPCC Plan for assistance with containment and cleanup procedures.
- 7) If the spill is detected after normal business hours, the primary Schnitzer Steel contact will provide interim instructions to onsite personnel and will reach the facility as quickly as possible.
- 8) If the spill is of sufficient magnitude that it exceeds the ability of Schnitzer Steel to contain it and/or effectively clean it up, the primary Schnitzer Steel contact will notify a qualified spill contractor obtain assistance with spill response activities.
- 9) If the spill is of sufficient magnitude that it meets or exceeds the reportable conditions identified in Section 6.1 of this SPCC Plan, the primary Schnitzer Steel contact will notify the Oregon DEQ via the 24-hour Spill Reporting Hotline number listed in Section 7 of this SPCC Plan.
- 10) If additional notifications are necessary (e.g., medical response, police, fire department, etc.), the primary Schnitzer Steel contact (or, in the case of immediate emergency, the onsite designated employee responsible for operations) will notify appropriate entities.

Schnitzer Steel Industries, Inc. 12005 N Burgard St/Portland, OR

- 11) The primary Schnitzer Steel contact will coordinate appropriate corrective actions and cleanup procedures as required, including obtaining additional resources if necessary.
- Spent materials (e.g., absorbent pads, kitty litter, etc.) will be temporarily placed either in 55-gallon drums or stored on and beneath plastic sheeting pending disposal. These spent materials will then be placed in federal Department of Transportation-approved (DOT-approved) drums prior to shipment to a disposal facility and will be disposed of in accordance with applicable local, state and federal regulations.
- The primary Schnitzer Steel contact will complete the "Discharge Notification" Form (see Appendix B) and will prepare and implement a plan to avoid recurring spill incidents (e.g., additional training requirements, modifications to procedures and/or equipment, etc.).
- 14) The primary Schnitzer Steel contact will coordinate the preparation and submittal of a report to the Oregon DEQ as described in Section 6.2 of this SPCC Plan.

# 5.2 Response to a Major Discharge

A "major" discharge is defined as one that cannot be safely controlled or cleaned up by facility personnel. Major discharges generally include those in which:

- ♦ the quantity of oil product discharged is large enough to spread beyond the immediate discharge area;
- discharged material enters water;
- discharged material requires special equipment or training to clean up;
- discharged material poses a hazard to human health or safety; or
- there is potential for fire and/or explosion.

If a major discharge of oil products associated with onsite ASTs, containers or fleet vehicles occurs (e.g., due to leakage, transfer operations, equipment failure, etc.), attending Schnitzer Steel personnel will perform the following.

- Immediately shut down transfer operations (in the case of transfer operations to the AST, this procedure will be coordinated with product delivery personnel) and determine potential fire/explosion hazard. If hazard is immediate, evacuate facility and notify appropriate emergency agencies.
- 2) Close valves and/or caps on the AST, container, delivery truck tank and/or vehicle being filled.
- 3) Shut down the pumps.
- 4) Place absorbent pads and/or socks in the path of the spill and the affected drainage area.
- 5) Secure absorbent pads, socks, etc. with absorbent material.
- 6) Notify the primary Schnitzer Steel contact identified in Appendix E of this SPCC Plan for assistance with containment and cleanup procedures.
- 7) If the spill is detected after normal business hours, the primary Schnitzer Steel contact will provide interim instructions to onsite personnel and will reach the facility as quickly as possible.

- 8) If the spill is of sufficient magnitude that it exceeds the ability of Schnitzer Steel to contain it and/or effectively clean it up, the primary Schnitzer Steel contact will notify a qualified spill contractor obtain assistance with spill response activities.
- 9) If the spill is of sufficient magnitude that it meets or exceeds the reportable conditions identified in Section 6.1 of this SPCC Plan, the primary Schnitzer Steel contact will notify the Oregon DEQ via the 24-hour Spill Reporting Hotline number listed in Section 7 of this SPCC Plan.
- 10) If additional notifications are necessary (e.g., medical response, police, fire department, etc.), the primary Schnitzer Steel contact (or, in the case of immediate emergency, the onsite designated employee responsible for operations) will notify appropriate entities.
- 11) The primary Schnitzer Steel contact will coordinate appropriate corrective actions and cleanup procedures as required, including obtaining additional resources if necessary.
- Spent materials (e.g., absorbent pads, kitty litter, etc.) will be temporarily placed either in 55-gallon drums or stored on and beneath plastic sheeting pending disposal. These spent materials will then be placed in federal Department of Transportation-approved (DOT-approved) drums prior to shipment to a disposal facility and will be disposed of in accordance with applicable local, state and federal regulations.
- 13) The primary Schnitzer Steel contact will complete the "Discharge Notification" Form (see Appendix B) and will prepare and implement a plan to avoid recurring spill incidents (e.g., additional training requirements, modifications to procedures and/or equipment, etc.).
- 14) The primary Schnitzer Steel contact will coordinate the preparation and submittal of a report to the Oregon DEQ as described in Section 5.0 of this SPCC Plan.

# 5.3 Waste Disposal

Federal requirements pertaining to oil spill incidents vary depending on the medium affected (e.g., if only soil and not surface water is impacted the incident is referred to state cleanup requirements), the location and size of the spill, and the geographic area impacted.

Cleanup requirements for spill incidents or releases of oil and/or hazardous material must be conducted pursuant to OAR 340-108-030 and OAR 340-108-040 and will incorporate the following.

- 1. Cleanups will be consistent with the requirements outlined in Sections (2) and (3) of OAR 340-108-030.
- 2. Immediate repair, corrective or containment actions will be taken to 'clean up' a threatened spill or release of oil and/or hazardous materials.
- 3. Cleanup procedures used should employ "...the best available methods of cleanup to achieve the lowest practicable level of contamination" as determined by the Oregon DEO.
- 4. The Oregon DEQ may require the party responsible for the spill or release incident to prepare a written report within 15 days of the incident that provides a complete description of the spill incident/release and the steps taken to prevent a recurrence of the spill incident/release.

# 5.4 Discharge Notification

40 CFR Part 110.4 defines reportable discharges of oil to navigable waters as discharges that: violate applicable water quality standards, or 2) cause a film or sheen or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines. Oil release incidents that meet or exceed this definition must be reported to the National Response Center. The U.S. EPA Region 10 Emergency Spill Hotline may also be contacted although this is not mandatory (i.e., the National Response Center contacts the appropriate U.S. EPA regional office in case of an oil spill incident).

OAR 340-108-020(4) states that a surface spill or release involving oil must be reported to the Oregon Emergency Management Division of the Oregon DEQ if the following apply.

- 1. The quantity of the oil spill exceeds 42 gallons; and/or
- any quantity of oil that, if spilled (or if likely to escape) into waters of the state, would "...produce a visible oily slick, oily solids, or coat aquatic life, habitat or property with oil...".

In addition to the above notifications, 40 CFR 112.4 requires that information be submitted to the U.S. EPA Regional Administrator and the appropriate state agency in charge of oil pollution control activities (i.e., Oregon DEQ) whenever a facility discharges:

- ◆ More than 1,000 gallons in a single event; or
- ♦ More than 42 gallons of oil in each of two discharge incidents within a 12-month period.

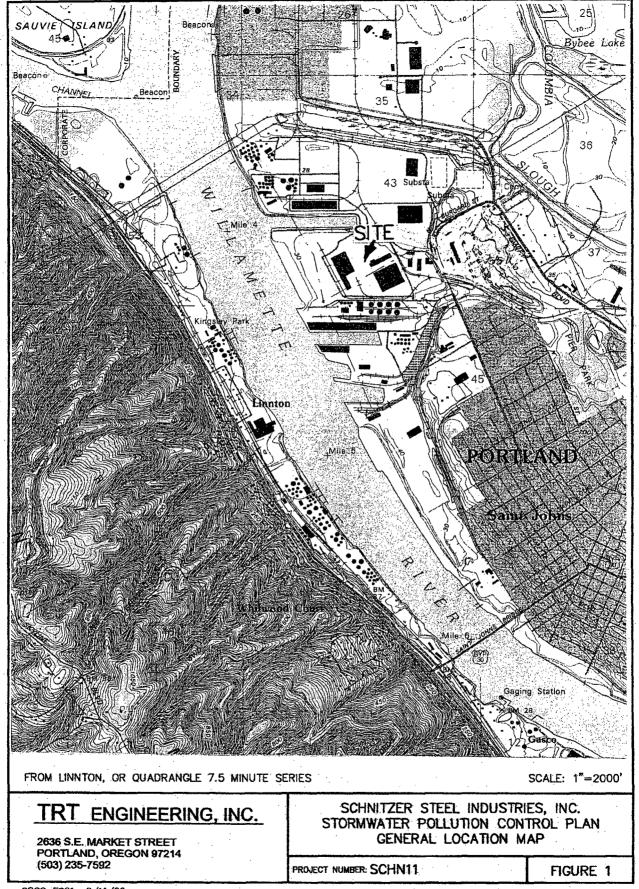
Emergency contact information is provided in Appendix F of this SPCC Plan. This contact information is also posted at appropriate locations (i.e., oil product transfer areas) at the facility in the event of an emergency. The Discharge Notification form for use in the event of a spill incident is included in Appendix B of this SPCC Plan.

#### 5.5 Cleanup Contractors and Equipment Suppliers

Contact information for spill response and cleanup contractors is provided in Appendix F. These contractors should have the necessary equipment to respond to a discharge of oil that affects the Willamette River or adjoining shorelines.

Spill response supplies are located in the warehouse at the Schnitzer Steel facility. The inventory of response supplies and equipment is provided in Appendix I of this Plan. The inventory is reviewed during the monthly visual inspection process.

# **FIGURES**



SPCC\_FG01 2/11/06

# **TABLES**

Table 1-1: Plan Review Log

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Previous PE certifications of this Plan are summarized below.

Date	Scope	PE Nam	Licensing e Registr	State and ation No.
	<u>.</u>		· .	_:

Table 1-2: SPCC Cross-Reference

Provision	Plan Section	Page
112.3(d)	Professional Engineer Certification	
112.3(e)	Location of SPCC Plan	
112.5	Plan Review	
		Table 1-
112.7	Management Approval	
112.7	Cross-Reference with SPCC Rule	Table 1-
112.7(a)(3)	Part 2: General Facility Information Appendix A: Site Plan and Facility Diagram	Appendix
112.7(a)(4)	5.4 Discharge Notification	· .
		Appendix Appendix I
112.7(a)(5)	Part 5: Discharge Response	1
112.7(b)	3.4 Potential Discharge Volumes and Direction of Flow	
112.7(c)	3.5 Containment and Diversionary Structures	•
112.7(d)	3.6 Practicability of Secondary Containment	
(,-,		•
112.7(e)	3.7 Inspections, Tests, and Records	1 Appendix I
112.7(f)	3.8 Personnel, Training and Discharge Prevention Procedures	1
112.7(g)	3.9 Security	. 1
112.7(h)	3.10 Tank Truck Loading/Unloading	. 1
112.7(i)	3.11 Brittle Fracture Evaluation	N
112.7(j)	3.12 Conformance with Applicable State and Local Requirements	
112.8(b)	4.1 Facility Drainage	1:
112.8(c)(1)	4.2.1 Construction	1
112.8(c)(2)	4.2.2 Secondary Containment	1:
112.8(c)(3)	4.2.3 Drainage of Diked Areas	N/ Appendix I
112.8(c)(4)	4.2.4 Corrosion Protection	1:
112.8(c)(5)	4.2.5 Partially Buried and Bunkered Storage Tanks	1
112.8(c)(6)	4.2.6 inspection Appendix B - Facility Inspection Checklists	1 Appendix (
112.8(c)(7)	4.2.7 Heating Coils	1
112.8(c)(8)	4.2.8 Overfill Prevention System	1
112.8(c)(9)	4.2.9 Effluent Treatment Facilities	. 1
112.8(c)(10)	4.2.10 Visible Discharges	1
112.8(c)(11)	4.2.11 Mobile and Portable Containers	1
112.8(d)	4.3 Transfer Operations, Pumping and In-Plant Processes	1
112.20(e)	Certification of Substantial Harm Determination	Appendix I

<sup>\*</sup> Only selected excerpts of relevant rule text are provided. For a complete list of SPCC requirements, refer to the full text of 40 CFR part 112.

Table 2-1: Oil Storage

Location	Storage Type	Contents
Building B (maintenance bay)	Drums	Antifreeze, motor oil, lub grease, gear oil various 55-gal
Building B	Transformers	Dielectric Fluid, 6 35-gal containers
Aboveground Oil/Fuel Storage Area	AST	Recyclable Oil, 500-gal
	AST	Recyclable Oil, 250-gal
	AST	Hydraulic Oil, 500-gal
	AST	Motor Oil, 500-gal
	AST	Motor Oil, 500-gal
	AST	Motor Oil, 250-gal
	Drums	Misc. Oil, 55-gal
Shear	Equipment	Hydraulic Oil, 5,230-gal
Shear Transformer	Transformer	Dielectric Fluid, 320-gal
·	Transformer	Dielectric Fluid, 570-gal
Shredder	Transformer	Dielectric Fluid, 1,000-gal
	AST	Pump Hydraulic Oil, 300-gal
	Drums	Motor Oil, various lubricants 55-gal
Shredder Transformers	Transformer	Dielectric Fluid, 2,200 gal
Shredder (maintenance bay)	Drums	Various lubricants, 33-gall

Table 3-1: Potential Discharge Volumes and Direction of Flow

	Maximum			
	volume released	Maximum		Secondary
Potential Event	(gailons)	discharge rate	Direction of Flow	Containment
Bullding B (Maintenance Bay)	y y history and did it one in one from the conflict the children	Obsert Adding a substitution of the second	Serve recently the restricted and an annual	E:T#17-E:Uniur/unianininininininininininininininininini
Drum or container failure	55	Gradual to instantaneous	N to storm sewer	Floor or pit drain
Transformer failure	35	Gradual	To floor only	Concrete dike
Vehicle leak	50	Instantaneous	N to storm sewer	None
Building B (Fuel Storage Area)				
Drum or container failure	1 to 500	Gradual to instantaneous	N to storm sewer	Metal pan and oil/water separator
Tank truck leak or failure during unloading	1 to 2,000	Gradual to instantaneous	N to storm sewer	Oil/water separator
Hose leak during truck loading	1 to 300	60 gal/min	N to storm sewer	Oil/water separator
Shear	•			
Hose leak or containment failure	1 to 5,230	Gradual to instantaneous	N or E to storm sewer	Spill kit and building floor
Shear Transformer				
Leak or failure of reservoir	1 to 570	Gradual to instantaneous	N to storm sewer	Spill kit
Shredder				
Hose leak or overfills	1,000	Gradual to instantaneous	N to storm sewer (treatment/recycle)	Spill kit, treatme system
Shredder Transformers				
Leak or failure of reservoir	2,200	Gradual to instantaneous	W to storm sewer	Containment line

Table 3-2: Inspection and Testing Program

Facility Component	Action	Frequency/Circumstances
Aboveground container	Test container integrity. Combine visual inspection with another testing technique (non-destructive shell testing). Inspect outside of container for signs of deterioration and discharges.	Following a regular schedule (monthly, annual, and during scheduled inspections) and whenever material repairs are made.
Container supports and foundation	Inspect container's supports and foundations.	Following a regular schedule (monthly, annual, and during scheduled inspections) and whenever material repairs are made.
Liquid level sensing devices (overfill)	Test for proper operation.	Monthly
Diked area	Inspect for signs of deterioration, discharges, or accumulation of oil inside diked areas.	Monthly
	Visually inspect content for presence of oil.	Prior to draining
Lowermost drain and all outlets of tank truck	Visually inspect.	Prior to filling and departure
Effluent treatment facilities	Detect possible system upsets that could cause a discharge.	Daily, monthly
All aboveground valves, piping, and appurtenances	Assess general condition of items, such as flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces.	Monthly
Buried metallic storage tank	Leak test	Annually
Buried piping	Inspect for deterioration.	Whenever a section of buried line is exposed for any reason.
	Integrity and leak testing.	At the time of installation, modification, construction, relocation, or replacement.

**Table 3-3: Fuel Transfer Procedures** 

Stage ##		Tasks A Laboratory
Prior to		Visually check all hoses for leaks and wet spots.
loading/ unloading	<u> </u>	Verify that sufficient volume (ullage) is available in the storage tank or truck.
unioading	Ο.	Lock in the closed position all drainage valves of the secondary containment structure.
		Secure the tank vehicle with wheel chocks and interlocks.
		Ensure that the vehicle's parking brakes are set.
		Verify proper alignment of valves and proper functioning of the pumping system.
		If filling a tank truck, inspect the lowermost drain and all outlets.
		Establish adequate bonding/grounding prior to connecting to the fuel transfer point.
		Turn off cell phone.
During loading/ unloading		Driver must stay with the vehicle at all times during loading/unloading activities.
dilloading	0	Periodically inspect all systems, hoses and connections.
		When loading, keep internal and external valves on the receiving tank open along with the pressure relief valves.
	Ο.	When making a connection, shut off the vehicle engine. When transferring Class 3 materials, shut off the vehicle engine unless it is used to operate a pump.
		Maintain communication with the pumping and receiving stations.
	. 🗆 .	Monitor the liquid level in the receiving tank to prevent overflow.
		Monitor flow meters to determine rate of flow.
	. <b>D</b> .	When topping off the tank, reduce flow rate to prevent overflow.
After loading/		Make sure the transfer operation is completed.
unloading		Close all tank and loading valves before disconnecting.
		Securely close all vehicle internal, external, and dome cover valves before disconnecting.
: '		Secure all hatches.
		Disconnect grounding/bonding wires.
		Make sure the hoses are drained to remove the remaining oil before moving them away from the connection. Use a drip pan.
	ū	Cap the end of the hose and other connecting devices before moving them to prevent uncontrolled leakage.
	□ ,	Remove wheel chocks and interlocks.
,	· .	Inspect the lowermost drain and all outlets on tank truck prior to departure. If necessary, tighten, adjust, or replace caps, valves, or other equipment to prevent oil leaking while in transit.

Table 4-1: Scope and Frequency of Bulk Storage Containers Inspections and Tests

	4 <b>19</b> 10 10 10 10 10 10 10 10 10 10 10 10 10			## 15 H F F	nk ID		
Inspection/Test in Section Inspection by facility personnel (as per checklist of Appendix C)	#1 M A	#2 M A	#3 М А	M A	#5 #6	M A	Drums M A
External inspection by certified inspector (as per STI Standard SP-001)	20 yr	20 yr	10 yr	EE		10 yr	EE
Internal inspection by certified inspector (as per STI Standard SP-001)	t	†	20 yr*	EE ,		20 yr*	EE
Tank tightness test meeting requirements of 40 CFR 280					2 yr 🥕 2 yr		`

Legend:

M: Monthly

A: Annual

EE: Inspection not required given use of environmentally equivalent measure (refer to Section 3.1 of this Plan).

\* Or earlier, as recommended by the certified inspector based on findings from an external inspection.

† Internal inspection may be recommended by the certified inspector based on findings from the external inspection.

### **APPENDICES**

### Appendix A **Substantial Harm Determination**

Facility Name: Schnitzer Steel Industries - Burgard Yard

Facility Address: 12005 N. Burgard Road - Portland, Oregon

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

Yes

No X

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground storage tank area?

Yes

No X

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in 40 CFR part 112 Appendix C, Attachment C-III or a comparable formula) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments?

Yes

No X

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in 40 CFR part 112 Appendix C, Attachment C-III or a comparable formula) such that a discharge from the facility would shut down a public drinking water intake?

Yes

No X

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?

Yes

No X

#### Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

ENVIRONMENTAL ADMINISTRATOR

Name (type or print)

28 DEC 06

Date

## Appendix B Discharge Notification Form

Part A: Discharge Information	
General information when reporting a spill to outs Name: Schnitzer Steel Industrie Address: 12005 N. Burgard Road Portland, OR 97203 Telephone: (503) 286-6944 Owner/Operator: Schnitzer Steel Industrie 3200 NW Yeon Avenue Portland, OR 97210 Primary Contact: Mathew Cusma, Enviror Work: (503)286 Cell (24 hrs): (503)208	es, Inc. es,
Type of oil:	Discharge Date and Time:
Quantity released:	Discovery Date and Time:
Quantity released to a waterbody:	Discharge Duration:
Location/Source:	
Affected media: G air G water G soil	G storm water sewer/POTW G dike/berm/oil-water separator G other:
Notification person:	Telephone contact: Business: 24-hr:
Nature of discharges, environmental/health effect Injuries, fatalities or evacuation required?	s, and damages:
Part B: Notification Checklist	
<b>Di</b>	Date and time Name of person receiving call
Mathew Cusma, Environmental Administrator (503)286-6944 / (503) 209-6057	
Discharge in amount exceeding 10 gallons an Mathew Cusma, Environmental Administrator (503 286-6944 (503) 209-6057	a not anecung a waterbody or groundwater

Discharge in any amount and affecting (or threatening to affect) a waterbody						
Oregon Emergency Management Division 24- hour Spill Reporting Number (800) 452-0311						
National Response Center (800) 424-8802						
Medical Response, Police, Fire 911						
Spill Supplies/Equipment - PetroSorb (503) 205-7750						

<sup>\*</sup> The POTW should be notified of a discharge only if oil has reached or threatens sewer drains that connect to the POTW collection system.

### Appendix C Calculation of Secondary Containment Capacity

The maximum 24-hour rainfall recorded in the last 25 years at this location is 3.90 inches.

### **Bulk Storage Containment (Building B)**

Capacity of Largest Tanks within the Secondary Containment Area: = 500 gallons (on legs, no significant displacement)

Dike Dimensions:
Dike footprint = 15 feet x 5 feet
Dike height = 15 inches = 1.25 feet
Dike volume = 15' x 5' x 1.25' = 93.75 ft<sup>3</sup> x 7.48 gal/ft<sup>3</sup> = 701 gallons

Available Freeboard for Precipitation: 701 gallons - (500 gallons) = 201 gallons 201 gallons / 7.48 gallons/ $ft^3$  / (15 ft x 5 ft) = 0.36 ft = 4.3 inches

The containment therefore provides sufficient storage capacity for the largest bulk storage tank within the containment area, tank displacement, and precipitation. The containment capacity is equivalent to 140% of the capacity of the largest container ((701 gallons)/500 gallons).

The containment therefore provides sufficient storage capacity to contain both the largest storage compartment and the volume of precipitation that enters the containment.

## Appendix D Facility Inspection Checklists

The following checklists are to be used for monthly and annual facility-conducted inspections. Completed checklists must be signed by the inspector and maintained at the facility, with this SPCC Plan, for at least three years.

**Monthly Inspection Checklist** 

This inspection record must be completed each month except the month in which an annual inspection is performed. Provide further description and comments, if necessary, on a separate sheet of paper and attach to this sheet. \*Any item that receives "yes" as an answer must be described and addressed immediately.

Park Star Sales (1996) See 1 1997	tectorem as	It intrige	
	Y*	N	Description & Comments
Storage tanks			***
Tank surfaces show signs of leakage			
Tanks are damaged, rusted or deteriorated			
Bolts, rivets, or seams are damaged		<u> </u>	
Tank supports are deteriorated or buckled			
Tank foundations have eroded or settled			
Level gauges or alarms are inoperative			
Vents are obstructed			
Secondary containment is damaged or stained			·
Water/product in interstice of double-walled tank			
Dike drainage valve is open or is not locked			
Piping			
Valve seals, gaskets, or other appurtenances are leaking			
Pipelines or supports are damaged or deteriorated			
Joints, valves and other appurtenances are leaking		Ī	
Buried piping is exposed			
Loading/unloading and transfer equipment			
Loading/unloading rack is damaged or deteriorated			
Connections are not capped or blank-flanged			
Secondary containment is damaged or stained			
Berm drainage valve is open or is not locked		-	
Oil/water separator			
Oil/water separator > 2 inches of accumulated oil			
Oil/water separator effluent has a sheen			
Security			
Fencing, gates, or lighting is non-functional			
Pumps and valves are locked if not in use			
Response Equipment			
Response equipment inventory is complete			

Date:	Signature:	
ponse equipment inventory is complete		
ponse Equipment		 
nps and valves are locked if not in use		

### **Annual Facility Inspection Checklist**

This inspection record must be completed each year. If any response requires further elaboration, provide comments in Description & Comments space provided. Further description and comments, if necessary, must be provided on a separate sheet of paper and attached to this sheet.

\*Any item that receives "yes" as an answer must be described and addressed immediately.

	· Vx	ici. Nissa	Description & Comments
Storage tanks	Paris College	Wings.	Description a Comments
Tank #1	T	· ·	
Tank surfaces show signs of leakage	+	-	
Tank is damaged, rusted or deteriorated	<u> </u>		
Bolts, rivets or seams are damaged	,	-	
Tank supports are deteriorated or buckled	ļ		
Tank foundations have eroded or settled	-		
Level gauges or alarms are inoperative			
Vents are obstructed	ļ	ļ	
Tank #2	<u> </u>	ļ	
Tank surfaces show signs of leakage	<u> </u>		
Tank is damaged, rusted, or deteriorated		ļ	
Bolts, rivets, or seams are damaged			
Tank supports are deteriorated or buckled	<u> </u>		
Tank foundations have eroded or settled		ļ	
Level gauges or alarms are inoperative	<u> </u>		
Vents are obstructed		,	
Tank #3			
Tank surfaces show signs of leakage			
Tank is damaged, rusted, or deteriorated			
Bolts, rivets, or seams are damaged		1	
Tank supports are deteriorated or buckled			
Tank foundations have eroded or settled			
Level gauges or alarms are inoperative			
Vents are obstructed			
Tank #4			·
Tank surfaces show signs of leakage			
Tank is damaged, rusted or deteriorated			
Bolts, rivets or seams are damaged			
Tank supports are deteriorated or buckled			
Tank foundations have eroded or settled	1		
Level gauges or alarms are inoperative			
Vents are obstructed	1		·
Oil is present in the interstice			
Tank #7		<u> </u>	
Tank surfaces show signs of leakage			
Tank is damaged, rusted, or deteriorated	<del> </del>	<b>†</b>	
ramino admagod, radiod, or dotomorated	1	Ι.	

HENDELL MANGEMENT AS CRIMINAL VILLEMENT SECTION OF THE PROPERTY OF THE WARRANT OF THE PROPERTY	120:120	12560 2500	ELIGINA : BREEKE	SPERSON AND SERVICES	MINE TO SERVICE
	Y*:	E N	Description &	:Comments	
Bolts, rivets, or seams are damaged				. ·	
Tank supports are deteriorated or buckled		1.		<u></u>	<u> </u>
Tank foundations have eroded or settled	<u> </u>			· · · · · · · · · · · · · · · · · · ·	
Level gauges or alarms are inoperative	<u> </u>	<u> </u>			-
Leakage in exhaust from heating coils					
Concrete dike					
Secondary containment is stained					
Dike drainage valve is open or is not locked					
Dike walls or floors are cracked or are separating			-		
Dike is not retaining water (following large rainfall)	•				
Piping				•	
Valve seals or gaskets are leaking					
Pipelines or supports are damaged or deteriorated					
Joints, valves and other appurtenances are leaking				·.	
Buried piping is exposed			·		
Out-of-service pipes are not capped					,
Warning signs are missing or damaged					
Loading/unloading and transfer equipment					•
Loading/unloading rack is damaged or deteriorated					
Connections are not capped or blank-flanged					
Rollover berm is damaged or stained		T			
Berm drainage valve is open or is not locked					
Drip pans have accumulated oil or are leaking					
Oil/water separator			3-1	٠.,	
Oil/water separator > 2 inches of accumulated oil				:	
Oil/water separator effluent has a sheen					
Security					
Fencing, gates, or lighting is non-functional					
Pumps and valves are not locked (and not in use)					
Response equipment					
Response equipment inventory is incomplete	1				,

### Appendix E - Spill Contingency Procedures and Emergency Information

### SPILL CONTINGENCY PROCEDURES

If oil/fuel associated with onsite activities is spilled, attending Jackson Oil personnel will perform the following.

- ♦ IMMEDIATELY shut down transfer operations.
- ◆ Determine potential fire/explosion hazard; if hazard poses immediate threat to human life/health, evacuate facility and notify appropriate emergency agencies.
- Place absorbent pads and/or socks in the path of the spill and affected drainage area.
- ♦ Notify the primary/secondary Jackson Oil contact identified below for assistance with containment, cleanup and potential notification procedures.

### EMERGENCY INFORMATION

Schnitzer Steel Industries, Inc. - Portland City, Oregon

Primary Contact:

Mathew Cusma (after hours)

(b) (6)

Office:

(503) 286-6944

National Response Center 24-Hour Spill Reporting Number:

1-800-424-8802

Oregon Emergency Management Division 24-Hour Spill Reporting Number:

(within state)

1-800-452-0311

(out of state)

(503) 378-4124

Spill Supplies/Equipment:

PetroSorb – 2800 NW 31st Avenue, Portland, Oregon

(503) 205-7750

Medical Response, Police, Fire:

911

**Nearest Emergency Medical Facility:** 

Emmanuel Hospital

### Appendix F - Record of Annual Discharge Prevention Briefings and Training

Briefings will be scheduled and conducted by the facility owner or operator for operating personnel at regular intervals to ensure adequate understanding of this SPCC Plan. The briefings will also highlight and describe known discharge events or failures, malfunctioning components, and recently implemented precautionary measures and best practices. Personnel will also be instructed in operation and maintenance of equipment to prevent the discharge of oil, and in applicable pollution laws, rules, and regulations. Facility operators and other personnel will have an opportunity during the briefings to share recommendations concerning health, safety, and environmental issues encountered during facility operations.

Date	Subjects Covered	Employees in Attendance	Instructor(s)
			• •
· ·			
·			

## Appendix G Discharge Response Equipment Inventory

The discharge response equipment inventory is verified during the monthly inspection and must be replenished as needed.

### Tank Truck Loading/Unloading Area

G	Empty 55-gallons drums to hold contaminated material	4
G	Loose absorbent material	200 pounds
G	Absorbent pads	3 boxes
$\mathbf{G}$	Nitrile gloves	6 pairs
$\mathbf{G}$	Neoprene gloves	6 pairs
G	Vinyl/PVC pull-on overboots	6 pairs
G	Non-sparking shovels	3
G	Brooms	3
G	Drain seals or mats	2
G	Sand bags	12

### **Maintenance Building**

G	Empty 55-gallons drums to hold contaminated material	1 .
G	Loose absorbent material	50 pounds
$\mathbf{G}^{-}$	Absorbent pads	1 box
G	Nitrile gloves	2 pairs
G	Neoprene gloves	2 pairs
G	Vinyl/PVC pull-on overboots	2 pairs
G	Non-sparking shovels 1	• - •
G	Brooms	1
G	Drain seals or mats	1

# APPENDIX C SITE INSPECTION CHECKLIST

## SITE INSPE ON CHECKLIST SCHNITZER STEEL PRODUCTS CO. - INTERNATIONAL TERMINALS Stormwater Pollution Prevention Plan

Date Inspector Signature MONTHLY INSPECTION ITEMS Date Completed Initials Inspection Items Status Comments Recommended Corrective Action Catch Basins Unobstructed/operative Filters present Grates in good condition Other Vehicles/Equipment Oil leaks Drip pans in place avement Condition/repair Swept/free of buildup Evidence of splll or leakage Debris, refuse Trailer sweep-off bins Trash dumpsters Other Spill response kits Unnacceptable or suspect materials Containers Kept closed Properly labeled In good condition No signs of leakage or spillage Outfalls Floating solids Oil&Grease sheen Oil/Water Separators Sediment buildup

## APPENDIX D TRAINING RECORD FORM

### TRAINING RECORD

discussion items included		
	Instructor's Signature:	
Participant's Name:	Participant's Job Function:	Participant's Signature:
		·
TE:	INSTRUCTORS NAM	Æ:
he training included a di	scussion of each section of the SWPPP a	and highlighted spill response,
he training included a di	scussion of each section of the SWPPP a	and highlighted spill response,
he training included a di ood housekeeping, and p scussion items included	scussion of each section of the SWPPP a	and highlighted spill response,
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he training included a di bod housekeeping, and p scussion items included:	scussion of each section of the SWPPP aroper operation and maintenance of equities:  Instructor's Signature:	and highlighted spill response, ipment. Other topics and
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TE:he training included a disposed housekeeping, and piscussion items included articipant's Name:	scussion of each section of the SWPPP aroper operation and maintenance of equities:  Instructor's Signature:	and highlighted spill response, ipment. Other topics and

### Industry Name: SCHNITZER STEEL PRODUCTS Co.

Instructions: Fill in the appropriate page number(s) indicating the location of all the required elements of the Storm Water Pollution Control Plan. Additional requirements may exist beyond the scope of this form depending on site-specific conditions. This form must be completed for the SWPCP to be considered complete.

			a Page W	Approved
al terimité Sch	ideloi(ex s	Requirement To the Marie Capital		
Signature	A.1.d	Signed and certified in accordance with 40 CFR 122.22.	PAGE 28	
Authorship	A.1.c	Name(s) of the person(s) who prepared the plan.	TITLE PAGE	
		Site Name	TITLE PAGE	
		Site Owner or Operator	PAGE 1	
		Permit File or Site Number	TITLE PAGE	<u> </u>
Title Page	A.3.a	Contact Person Name and Telephone Number	PAGE 2	
• .		Site Physical Address	TITE PAGE	
		Site County	TITLE PAGE	
		Site Mailing Address (if different)	PAGEZ	
Site		Industrial activities conducted on-site.	Pp. 2,6	
Description	A.3.b.i	Significant materials (include methods of storage, usage, treatment, and disposal).	PP, 9,10, TABLE	
General Location Map	A.3.b.ii	Site in relation to surrounding properties, transportation routes, surface waters, and other relevant features.	Fig. 1	
: :		Drainage Patterns	F14 Z	
	•	Drainage and Discharge Structures (piping, ditches, etc.)	ı	
	•	Drainage Area Outline for each Stormwater Outfall	÷	
		Paved Areas		
		Buildings		
Site Map	A.3.b.iii	Areas of Outdoor Manufacturing, Treatment, Storage or Disposal of Significant Materials		
Site iviup	11.0.0.111	Existing Stormwater Structural Control Measures		
	,	Material Loading and Access Areas	V	<u> </u>
.		Hazardous Waste Treatment, Storage and Disposal Facilities	N/A	
		Location of Wells (including waste injection wells, seepage pits, and drywells)	F16. Z	
		Location of Springs, Wetlands and Surface Water bodies (both on-site and adjacent to the site)	F16. Z	
Impervious Area	A.3.b.iv	Estimates, by individual stormwater outfall, of impervious area including paved areas and building roofs.	P. 11	
Potential Pollutants	A.3.b.v	Identify potential pollutants that could be present in stormwater for each area where a reasonable potential exists.	TABLE 1 PP. 9,10	

Receiving Waters	A.3.b.vi	Name(s) of the receiving water(s). If to a municipal storm sewer system include ultimate receiving waters and name of municipality.	P. Z	
		Identify outfall(s) and point(s) where stormwater monitoring will occur.	F16. Z, P. 25	
Monitoring	foring A.3.b.vii	If all outfalls are not monitored, include description of outfalls, data, and analysis supporting outfalls are representative according to B.2.b.	P. 25	
	A.3.c.i	Best Management Practices (BMPs). Include BMPs already in practice and a schedule for future implementation including (Containment, Oil and Grease, Waste Chemicals and Material Disposal, Erosion and Sediment Control, Debris Control, Stormwater Diversion, Covering Activities, Housekeeping).	PP. 10-25, TABLE 2	
Site	<b>A</b> :3.c.ii	Spill Prevention and Response Procedures. Include methods to prevent spills along with clean-up and notification procedures. Spill prevention plans may be substituted providing that stormwater is adequately addressed.	PP. 21-22, APP. B	
	A.3.ciii	Preventative Maintenance. (1) Monthly inspections of areas where potential spills of significant materials or industrial activities can impact stormwater. (2) Monthly inspections of stormwater control measures, structures, catch basins and treatment facilities. (3) Cleaning, maintenance or repair of stormwater system.	PP. 22-23, APP. C	
	A.3.c.iv	Employee Education. Employee orientation and education program informing of components and goals of the SWPCP. Orientation w/in 30 days, education annually.	PP. 23-24	· 文章

onodicateus conty  Date of SWPCP:  Reviewed by:  Reviewed on:  Reviewed on:			
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	Pate Neterleu.	NEVIEWED OIL FALL STORES OF THE	

Comments:

### STORMWATER POLLUTION CONTROL PLAN

### SCHNITZER STEEL PRODUCTS CO.

International Terminal

12005 N Burgard Road Portland, Oregon 97203 Multnomah County

File No. 108103

November 2007

Authored By: Mathew Cusma, Schnitzer Steel Industries, Inc.

### STORMWATER POLLUTION CONTROL PLAN SCHNITZER STEEL PRODUCTS CO. International Terminal

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Appendix C: Site Inspection Checklist
Appendix D: Training Record Form

### STORMWATER POLLUTION CONTROL PLAN

### SCHNITZER STEEL PRODUCTS CO.

### **International Terminal**

### PLAN OVERVIEW

#### 1.1 Introduction

This Stormwater Pollution Control (SWPC) Plan covers the operations of the Schnitzer Steel Products Co. (SSP) scrap metal recycling facility and International Terminal (IT) cargo facility located in the Burgard Industrial Park on the east bank of the Willamette River in north Portland, Oregon. This SWPC Plan was prepared in accordance with the requirements of the Oregon Department of Environmental Quality (DEQ) General Permit 1200-Z issued under the National Pollutant Discharge Elimination System (NPDES).

The U.S. Environmental Protection Agency's (EPA's) model permit for the scrap processing and recycling industry (U.S. EPA, 1993), and the DEQ's Guidance Document for Preparation of the NPDES Storm Water Pollution Control Plan (DEQ, 1997) were used as guidance for the preparation of this SWPC Plan.

This SWPC Plan describes the SSP-IT facility and its operations; identifies potential sources of stormwater pollution at the facility; and describes appropriate stormwater pollution control measures to reduce the potential for discharge of pollutants in stormwater run-off. In addition, the requirement for periodic review of this Plan is established.

#### **General Facility Information** 1.2

Following is a brief summary of general facility information related to the SSP-IT site:

Name of Facility: Schnitzer Steel Products Co.

Schnitzer Steel Products Co. Owner:

Schnitzer Steel Products Co. Operator:

**Facility Address:** 12005 N Burgard Road

Portland, Oregon 97203

Mailing Address:

P.O. Box 10047

Portland, Oregon 97296-0047

Facility Contacts:

Primary:

im Goodrich General Manager

(503) 286-5771

(503) 793-0023 (cell)

Alternate:

Jim Jakubiak, Environmental Administrator

(503) 286-6976

(503) 519-4795 (cell)

Alternate:

Mathew Cusma, Environmental Administrator

(503) 286-6944

(503) 209-6057 (cell)

Number of Employees:

130 (approximate - varies)

Operations Description: Ferrous scrap metal recovery and recycling. Scrap metals are delivered to the site from private and commercial parties by truck, rail, or barge, and are graded and sorted on-site. Scrap metals may be resized by shredding, shearing, or torching, and are ultimately shipped off site by truck, rail, barge, or ship for use as feed stock in domestic or foreign steel mills.

Standard Industrial

Classification (SIC) Code: 5093, Scrap and Waste Materials

<u>Site Drainage</u>: The site is flat and has been graded to promote desired drainage patterns. The site is predominantly paved (asphalt) and stormwater drains by sheet flow to catch basins. Catch basins drain through subsurface piping to oil/water separators and/or sand filters, which discharge either to an onsite process water management system, or off site to the Willamette River.

Stormwater Outfalls: Sixteen active outfalls discharge to the Willamette River.

### 1.3 Plan Objectives

In November 1990, the U.S. EPA adopted regulations (40 CFR Parts 122, 123, and 124) to control stormwater discharges from industrial facilities and certain municipalities through the NPDES permit program. The goal of the NPDES permit program is to improve the quality of surface waters by reducing the quantity of pollutants that are

potentially contained in stormwater run-off. In the State of Oregon, the Oregon DEQ has been granted the authority to administer the NPDES program.

The NPDES program specifies certain SIC categories [40 CFR §122.26(b)(14)(i-ix, xi)] for which discharge permits are required. Any facility falling within such a category, and from which stormwater leaves the site and enters surface waters through a "point source," must apply for a stormwater discharge permit under the NPDES system. In addition, facilities subject to NPDES permitting requirements, which include the SSP-IT facility, are required under the permit conditions to prepare and implement a Stormwater Pollution Control Plan. The SSP-IT facility is currently permitted to discharge stormwater to waters of the State under General Permit 1200-Z.

The objectives of this SWPC Plan are: 1) to identify potential sources of pollution at the facility which could adversely affect the quality of the stormwater discharges from the site, and 2) to describe appropriate pollution control measures and best management practices (BMPs) that will address the identified potential pollution sources and stormwater quality requirements for this facility. Proposed control measures include active potential source isolation and abatement, as well as support programs such as a periodic facility inspection program and detailed recordkeeping and reporting procedures. These measures will assist the compliance staff in maintaining compliance with the terms and conditions of General Permit 1200-Z.

### 1.4 SWPC Plan Organization

The SWPC Plan is organized into sections as follows:

### Section 2.0: Stormwater Pollution Prevention Team

Personnel responsible for implementation of the SWPC Plan are identified and their specific responsibilities related to stormwater management are detailed.

### Section 3.0: Facility Description

A detailed description of the site layout, facility operations, and potential sources of stormwater pollution is presented. A facility location map, a site plan showing drainage and other relevant features, an inventory of significant materials potentially exposed to stormwater, and a discussion of past spills are also included.

### Section 4.0: Stormwater Pollution Controls

Stormwater management controls, and spill prevention and response procedures are detailed. Preventive maintenance measures, the employee training program, and periodic SWPC Plan review and amendment requirements are set forth.

### Section 5.0: Stormwater Monitoring Program

The stormwater monitoring program, including sampling frequencies and protocols, analytical parameters, and recordkeeping and reporting requirements are presented.

### Section 6.0: Implementation Schedule

The SWPC Plan implementation schedule and the discharge permit compliance schedule are detailed.

### Section 7.0: Additional Permit Requirements

Oregon Administrative Rules (OAR) specific to the Willamette Basin are addressed.

### Section 8.0: Plan Certification

Certification of the SWPC Plan by the owner/operator is presented.

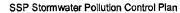
### 2.0 STORMWATER POLLUTION PREVENTION TEAM

Stormwater pollution prevention depends on the awareness and cooperation of all SSP employees. However, the Stormwater Pollution Prevention Team is primarily responsible for developing, implementing, maintaining and revising this SWPC Plan; ensuring facility employees receive appropriate training in BMPs related to stormwater; conducting periodic site inspections to identify areas needing improvement; and ensuring that any identified deficiencies are corrected in a timely manner.

Team members and their specific duties and responsibilities related to stormwater management are detailed below. All members of the team are familiar with the management and operations of the SSP-IT facility.

Jim Goodrich, General Manager: Responsible for supervision and direction of all stormwater pollution prevention activities at the facility, including compliance with the General Permit and the SWPC Plan. Releases annual stormwater quality reports to the DEQ (July 15<sup>th</sup> each year), and approves necessary budget items and schedules for implementation of pollution control measures as required by the SWPC Plan.

Mathew Cusma, Environmental Administrator: Responsible for overseeing day-today SWPC Plan implementation. Performs necessary recordkeeping and reporting activities. Assists with employee training related to stormwater pollution prevention. Conducts periodic site inspections and SWPC Plan effectiveness evaluations.



Jim Jakubiak, Environmental Administrator: Responsible for overseeing day-to-day SWPC Plan implementation. Performs necessary recordkeeping and reporting activities. Assists with employee training related to stormwater pollution prevention. Conducts periodic site inspections and SWPC Plan effectiveness evaluations.

### 3.0 FACILITY DESCRIPTION

### 3.1 Facility Location and Description

The SSP-IT facility occupies approximately 70 acres of upland in the Rivergate industrial area between the Willamette River and North Burgard Road in Portland, Oregon. Access to the facility is provided primarily by an entrance roadway off of North Burgard Road near the intersection of North Terminal Road. The site can also be accessed using North Time-Oil Road. A facility location map is provided as Figure 1.

The site is fenced on three sides, with the fourth side bounded by the river. The active portion of the property is bounded as follows:

- On the north, by a marine vessel berthing slip, Jefferson Smurfit Corporation, and Time Oil Co.
- On the east, by Northwest Pipe & Casing Co., Lampros Steel, and Western Machine Works, and by North Burgard Road.
- On the south, by Terminal 4, a shipping terminal owned and operated by the Port of Portland.
- On the west, by the Willamette River.

Neighboring properties are not addressed in this SWPC Plan, except to the extent that their discharge may affect discharges from the outfalls associated with SSP-IT. SSP-IT is in continuing communication with these facilities regarding issues related to stormwater management.

The facility is predominantly paved (asphalt), and includes two large warehouses, several modular office buildings, a lunch/locker room, and two scale houses. A large automobile shredder, including associated magnetic separators and conveyors, is located near the center of the property, and a hydraulic guillotine shear is located in the north-central portion of the property.

### 3.2 Operations Description

Metal scrap consisting of a wide variety of recycled items including metal parts, automobiles, appliances, and steel fabrication remnants is delivered to the facility from private and commercial parties by truck, rail, or barge. The scrap is weighed, graded and sorted according to its type, size and thickness, and the transport is directed to the appropriate location at the facility for offloading.

Once received, the scrap material is either processed immediately (e.g., in the shredder or shear, depending on the grade of the material), or is staged for future processing or offsite transfer. Materials processed in the shredder include automobiles, appliances, baled and loose tin and sheet metal, and other relatively thin metals. The shredder reduces the size of the scrap and separates the ferrous metals from non-ferrous metals and non-metallics (Automobile Shredder Residue [ASR]) using a variety of means including magnetic and counter-current separators. The shear is used to re-size steel plate, heavy-walled pipe, cable, and other relatively thick scrap, using a hydraulic guillotine. Items not amenable to processing in either the shredder or the shear may be cut by portable shears or by torch, or transferred offsite as-is.

Processed and unprocessed scrap is temporarily staged at the facility in outdoor piles until offsite shipment is arranged. The processed and sorted scrap is then loaded into trucks, rail cars, cargo containers, barges, or ships for shipment off site to domestic and foreign steel mills, where the material is melted and formed into new steel for manufacturing of new products. The ASR is loaded on trucks for shipment offsite for use as an approved alternate daily cover material at appropriate Subtitle D landfills.

In addition to these primary facility operations, several support operations, including weigh-scales, vehicle and equipment maintenance, steel remnant storage and sales, bulk material (e.g., pig iron, ferro-manganese, silica-manganese, etc.) storage and sales, and truck washing, are conducted at the facility. Materials related to these support operations that have the potential to adversely impact stormwater, including petroleum products, coolants (glycol), and waste fluids (oils and coolant), are stored either indoors or in a covered outdoor area provided with secondary containment. Steel, pig iron, manganese, and similar bulk materials are typically stored outdoors in paved areas divided by steel retaining walls.

### 3.3 Site Map

Pursuant to the requirements of NPDES General Permit 1200-Z, a site map of the facility is provided with this SWPC Plan. The site map shows the following features:

- Drainage patterns
- Drainage and discharge structures

- Catch basins
- Sumps.
- Storm sewer piping
- Outfalls
- An outline of the drainage area for each stormwater outfall
- Paved areas and buildings within each drainage area
- Areas used for outdoor manufacturing, treatment, storage, and/or disposal of significant materials (no disposal occurs at the site)
- Structural control measures for reducing pollutants in stormwater run-off
  - Sand filters
  - Oil/water separators
  - Containment booms
  - Grease traps
- Material loading and access areas
- Hazardous waste treatment, storage and disposal facilities (NONE)
- Locations of wells, including waste injection wells (NONE), seepage pits (NONE), dry wells (NONE), etc.
- Locations of springs, wetlands, and other surface water bodies
  - Willamette River
  - Berthing Slip (appendage of Willamette River)

### 3.4 Stormwater Drainage

Stormwater run-off at the SSP-IT facility is routed to 16 active outfalls which discharge into the Willamette River. Each of the outfalls serves a specific drainage area within the facility boundaries, as shown on the site map provided with this SWPC Plan. In addition, there are several remnant outfalls at the site related to historic operations that no longer discharge stormwater. Table 1 presents a summary of each of the outfalls at the facility, the activities conducted in the associated drainage areas, and the significant materials present.

In addition to the facility drainage areas served by the outfalls identified in Table 1, precipitation incident in five drainage areas is contained and used in the scrap processing operations at the site. These areas are described below:

 The area immediately surrounding the shredder (approximately four acres) is paved and provided with catch basins piped to a closed-loop collection and treatment system.

Table 1:	Site	Drainage Summary			
OUTFALL ID 1	DRAINAGE AREA ACTIVITIES	SIGNIFICANT MATERIALS	POTENTIAL POLLUTANTS	END-OF-PIPE TREATMENT	COLLECT SW SAMPLE
1	Entrance roadway, vehicle scales, vehicle parking and traffic, offices	Parked vehicles and traffic, ferrous and non-ferrous materials	Oil and grease, petroleum hydrocarbons, heavy metals (dust)	Coalescing Plate Oil/Water Separator	NO – intermittent discharge. Represented by Outfall 14
3A, 3B	Steel storage, bulk material (e.g., pig iron) storage, traffic	Steel and other ferrous materials, vehicles	Oil and grease, petroleum hydrocarbons, heavy metals (dust)	Oil/Water Separator, Sand Filter	YES
4A, 4B	Steel storage, bulk material (e.g., pig iron) storage, traffic	Steel and other ferrous materials, vehicles	Oil and grease, petroleum hydrocarbons, heavy metals (dust)	Oil/Water Separator, Sand Filter	YES
5A, 5B	Steel storage, bulk material (e.g., pig iron) storage, truck scales, traffic	Steel and other ferrous materials, crushed automobiles, traffic	Oil and grease, petroleum hydrocarbons, heavy metals (dust)	Oil/Water Separator, Sand Filter	YES
6A, 7	Ship slip and dock activities, scrap, steel and metal product loading and unloading	Heavy equipment, rail cranes, railroad cars and engines, scrap stockpiles	Oil and grease, petroleum bydrocarbons, heavy metals (dust)	Oil/Water Separator, Sand Filter	YES
13	Dock activities, scrap, steel and metal product loading and unloading	Shear, heavy equipment, railroad cars and engines, scrap stockpiles	Oil and grease, petroleum hydrocarbons, heavy metals (dust)	Eight-stage Oil/Water Separator	Represented by Outfall 14
14	Ferrous scrap storage, vehicle and rail road traffic, vehicle parking, offices	Vehicles, ferrous scrap	Oil and grease, petroleum hydrocarbons, heavy metals (dust)	Coalescing Plate Oil/Water Separator	YES
15	Ship slip and dock activities, scrap, steel and metal product loading and unloading	Heavy equipment, rail cranes, railroad cars and engines, scrap stockpiles	Oil and grease, petroleum hydrocarbons, heavy metals (dust)	Eight-stage Oil/Water Separator	YES
16	Vehicle parking, equipment storage, non- ferrous scrap receiving and storage, petroleum secondary containment area (under roof)	Parked vehicles, stored equipment, potential spillage	Oil and grease, petroleum hydrocarbons, antifreeze, heavy metals (dust)	Coalescing Plate Oil/Water Separator	Represented by Outfall 15
18	This outfall serves NW Pipe and adjacent properties (permitted separately). A small fuel island at the cast end of the property (operated by SSP) is also served by this outfall.	Vehicle traffic, potential spillage	Oil and grease, petroleum hydrocarbons, heavy metals (dust)	N/A	N/A
19	Vehicle traffic, rail car storage	Vehicle traffic, potential spillage	Dust, roadway accumulations	None	Represented by Outfail 20
20	Rail car storage, scrap storage	Ferrous scrap, vehicle traffic, potential spillage	Heavy metals (dust), oil and grease	None	Yes

- In addition to shredder operations, this area is used for staging of unprocessed scrap items, processed scrap, and ASR. Water collected in this area is settled and screened to remove bulk solids, and is then transferred to a 1 million gallon storage tank. Stored water is supplied to the shredder, as needed, to facilitate the shredding of metal materials and dust control. The water added to the shredder either evaporates, or is discharged with the shredded material, and drains back into the area catch basins to be recycled (i.e., it is a closed loop system). Because stormwater is not capable of providing sufficient water for this purpose during most of the year, water also may be drawn from a nearby supply well, as well as from the city water supply, to fulfill the need for shredder process water.
- An approximate 400 foot by 60 foot concrete slab (approximately <sup>1</sup>/<sub>2</sub> acre) located along the southern property boundary near the shredder drains through two large oil/water separators. This slab is used for storage of motor blocks, machine turnings, and other potentially oily scrap. Stormwater from this slab is pumped from the oil/water separator to the shredder for use as process water make-up.
- A small paved area south of the shear (approximately <sup>1</sup>/<sub>2</sub> acre) is served by a catch basin which is also piped to the shredder process water recycling system.
   This area is used primarily for storage of scrap electrical cable and for maintenance of large equipment.
- The electrical transformer substation serving the old shredder (located in the southwest corner of the site) is equipped with secondary containment including a blind sump. A manually operated pump has been installed in the sump to evacuate the containment area, as necessary. This water is pumped into the shredder process water recycling system.
- The concrete slab underlying the hydraulic shear is served by a large sump which collects stormwater. The stormwater is pumped from the sump through two large oil/water separators (located near the dock lunchroom), and is then transferred to the shredder process water recycling system for re-use.

### 3.5 Significant Materials and Potential Stormwater Pollutants

The NPDES General Permit 1200-Z requires the SWPC Plan to include a description of "significant materials" at the site which may be exposed to stormwater. For the purposes of the permit, "significant materials" are defined as including, but not limited to, "raw materials; fuels; materials such as solvents, detergents and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical that a facility is required to report pursuant to section 313 of title III of SARA; fertilizers; pesticides; and waste products such as ash, slag and sludge that have the potential to be released with storm water discharges."

Significant materials that might be expected at the SSP-IT facility include the following:

- Ferrous metal scrap
- Non-ferrous metal scrap
- Automobile shredder residue (ASR shredded plastic, fabric, carpet and rubber residuals from the recycling process)
- Bulk materials (pig iron, metal alloys, etc.)
- Petroleum products (new and used)
- Trash and debris
- Steel and other metal products

Both new and used vehicle maintenance fluids (e.g., oil, hydraulic fluid, antifreeze, etc.) are stored in drums and other closed containers, either inside an enclosed building, or within a covered secondary containment area. Potential contact of these materials with stormwater would be limited to leaks from vehicles or equipment, or potential spills.

As a result of the presence of these significant materials, and as summarized above in Table 1, the following potential stormwater pollutants have been identified:

- Petroleum hydrocarbons
- · Oil and grease
- Hvdraulic fluid
- Fuels (diesel, gasoline, etc.)
- Antifreeze (glycol)
- Heavy metals (dust)
- Dust/soils

### 4.0 STORMWATER POLLUTION CONTROLS

This section describes the stormwater pollution controls that will be implemented at the facility to reduce or eliminate the potential for pollutants to impact stormwater run-off from the site. The following categories of pollution controls are addressed, as required by NPDES General Permit 1200-Z:

- Stormwater Best Management Practices
- Containment
- Oil and Grease

- · Waste Chemicals and Material Disposal
- Erosion and Sediment Control
- Debris Control
- Stormwater Diversion
- Covering Activities
- Housekeeping
- Other Operational Controls (in addition to those required by permit)
- Spill Prevention and Response
- Preventive Maintenance
- Employee Education
- Recordkeeping and Internal Reporting Procedures
- Plan Review and Revision Requirements

### 4.1 Stormwater Management

The potential for stormwater pollution occurs when incident rainwater or stormwater runoff comes into contact with pollutants on exposed surfaces. Pollutants may dissolve, become suspended, or float on the surface of the water, or may attach (e.g., via absorption or adsorption) to soil particulates suspended in the stormwater. Stormwater quality at the SSP-IT facility has the potential to be impacted as a result of exposed or leaking vehicles or equipment, stockpiled scrap metals and bulk materials, staged shredder residues, and exposed pavement impacted by vehicle traffic and parking.

The vast majority of the SSP-IT property (approximately 90%) is paved (asphalt or concrete), and is graded to drain to catch basins. Most of the site's catch basins are designed as grease traps (i.e., with an inverted drain pipe). Stormwater run-off drains via sheet flow to the catch basins, the majority of which are piped to oil/water separators and/or settling cascades, and ultimately to the outfalls serving the site. There are a total of 16 active stormwater outfalls serving the site, which discharge to the Willamette River either directly, or via the berthing slip. As indicated in Table 1, above, two former outfalls (Outfall 17) is a remnant of the historical ship yard, and is not currently connected to any catch basins. Six other former outfalls (Outfalls 2, 8, 9, 10, 11 and 12) have been formally abandoned.

In addition, Outfall 18 primarily serves facilities east of the SSP-IT facility, at least one of which uses the outfall for permitted discharge of non-contact process water. SSP operates a small fuel island in an area near the east property boundary that is also served by this outfall. Stormwater in the fuel island area drains through grease-trap

catch basins and through a three-stage oil/water separator prior to joining other flows directed to the outfall.

As described in detail in Section 3.4, and again in Section 4.1.1 below, precipitation incident in five facility drainage areas is contained and used in the scrap processing operations at the site. These areas include the area immediately surrounding the shredder (approximately four acres), a concrete slab at the south property boundary (approximately  $^{1}/_{2}$  acre), a small area south of the shear (approximately  $^{1}/_{2}$  acre), the concrete slab underlying the shear, and a small secondary containment system for the old shredder electrical transformer substation.

SSP has implemented a variety of stormwater pollution controls, BMPs, and structural modifications to minimize the potential for contamination of stormwater run-off from the site. Stormwater pollution controls can generally be categorized as either source controls or structural controls. Source controls are practices that reduce or eliminate the potential for contact of stormwater with pollutant sources, or eliminate non-stormwater discharges (e.g., spills or leaks). Structural controls are in-pipe or end-of-pipe treatment systems and discharge volume reduction devices. Some controls, such as containment structures designed to isolate potential pollutant sources, may be classified in either category.

In general, source controls are given the highest priority for implementation under this SWPC Plan. SSP believes that control of potential pollution sources is a more proactive approach to stormwater pollution prevention, minimizing the need for often expensive end-of-pipe treatment technologies. However, due to the nature of scrap recycling operations and existing conditions, structural controls have also played an important role in stormwater pollution prevention at the facility, and will continue to be evaluated for implementation.

Table 2 provides a summary of the existing and proposed stormwater pollution control measures relevant to the SSP-IT facility. As indicated in the table, existing control measures are continuously undergoing evaluation for applicability and effectiveness, and some have been designated for improvement. The following subsections describe the control measures in greater detail.

Table 2: Stormwater Pollution Controls and BMPs						
Control/BMP	Frequency	Current	Improvement Needed	Future	Implementation Date	
Il vehicle maintenance conducted indoors.	at all times	<b>✓</b>	· · · · ·			
Maintenance schedule developed for all vehicles/equipment (based on manufacturer's recommendations).	once	<b>4</b>				
Orip pans or other containment in use for all stored vehicles/equipment to contain leaks.	at all times	<b>1</b>				
lds/covers in use on all trash bins and dumpsters.	at all times	<b>V</b> :				
hil/water separators inspected for excessive sediment accumulation (i.e., above drain pipe inlet).	monthly	· 🗸				
Dil/water separators pumped out.	as needed	<b>✓</b>				
additional treatment technology implemented for outfalls not meeting water quality criteria.	as needed	✓				
All vehicle washing restricted to covered truck wash.	at all times	✓				
xisting pavement maintained to minimize erosion.	as needed	<b>V</b>				
Accessible areas are swept with a vacuum/broom sweeper.	weekly	. 🗸			4.5	
Accessible areas are swept with a magnetic sweeper.	bi-weekly	✓				
Inpaved portions of site inspected for signs of erosion.	monthly .	· 🗸				
Run-off from shredder residues diverted away from outfalls and into shredder process water.	at all times	<b>V</b>				
Run-off from outdoor storage areas diverted away from outfalls,	at all times	1				
Accurate storm sewer drainage and piping layouts maintained.	at all times	1			Ongoing	
lazardous substances property identified, labeled and stored.	at all times	1				
Spill containment pallets in use under all containers of liquids outside of secondary containment structures.	at all times	1		i		
Oust controlled by maintaining clean pavement and posting speed limits, limiting the need for water application.	at all times	1				
Ory cleanup methods (e.g., absorbent) used for spilled or leaked liquids in processing and maintenance areas.	as needed	1				
Corporate Environmental Policy established and reviewed for applicability and adequacy (revised as necessary).	at all times	<b>~</b>		1.		
Scrap acceptance policy established and reviewed for applicability and adequacy (revised as necessary).	as needed	1				
Procedures established for managing potentially hazardous materials inadvertently received.	annually	<b>1</b>	19			
Spill prevention and response procedures established.	annually	<b>1</b>		1		
Employees trained regarding corporate environmental policy, stormwater pollution prevention, and spill response.	once	1				
Stormwater pollution prevention procedures reviewed, and revised as necessary.	once	1				
Storm drain covers provided in areas where spills or leaks are most prone to occur.	annually	. 🗸				
Spill response kits provided in areas where spills are most prone to occur.	annually	1				
Stationary equipment inspected for evidence of leaks or maintenance Issues which may result in leaks.	at all times	1			<b>!</b>	
Stormwater outfall discharges inspected for color, foam, sheen, and other visible evidence of potential problems.	at all times	1		<del>                                     </del>	<del>                                     </del>	

### 4.1.1 CONTAINMENT

As noted above, containment measures, which involve isolating potential pollution sources from contact with stormwater, may be classified as both a source control and a structural control. Containment measures play an important part in stormwater pollution control at the SSP-IT facility, and are generally considered to be the preferred mechanism for reducing or eliminating adversely impacted stormwater discharges. The following containment measures have been implemented at the facility to minimize the exposure of significant materials to stormwater:

- To the extent possible, vehicle and equipment maintenance activities are conducted inside a fully enclosed, concrete floored building. The building floor slopes toward low spots in the floor that serve as blind liquid collection points. Drains inside the building do not connect to the site's stormwater sewer system. Vehicle maintenance outside of the building is conducted only in the event of an emergency, such as the failure of hydraulic systems, and is limited to activities necessary to ensure capture and containment of fluids and other significant materials. Equipment maintenance outside of the building is limited to items that are not mobile or portable, or that are too large to bring inside the building.
- New and used motor oil, hydraulic fluid, antifreeze, etc. are stored in drums and other sealed containers under roof in a concrete secondary containment unit. Containers are elevated above the floor of the containment structure to facilitate detection and collection of spilled and accumulated liquids. Small quantities of these items may also be stored inside of the vehicle maintenance building, elevated on pallets or placed in polyethylene or steel drip pans.
- The paved area immediately surrounding the automobile shredder (approximately four acres) is sloped toward catch basins, which are piped to a concrete storage vault. Water collected in the vault is settled and screened and supplied to the shredder, as needed, as a coolant/lubricant to facilitate the shredding of metal materials. The water added to the shredder either evaporates in the process, or is discharged with the shredded material, draining back into the catch basins to be again recycled. This area is also used for stockpiling of shredded ferrous and non-ferrous metals and ASR.
- An approximate 400 foot by 60 foot concrete slab (approximately <sup>1</sup>/<sub>2</sub> acre) located along the southern property boundary near the shredder drains through two large oil/water separators. This slab is used for storage of motor blocks, machine turnings, and other potentially oily scrap. Stormwater from this slab is pumped from the oil/water separator to the shredder process water vault for use as process water make-up.
- A small paved area south of the shear (approximately  $^{1}/_{2}$  acre) is served by a catch basin which is also pumped to the shredder process water recycling

- system. This area is used primarily for storage of scrap electrical cable and maintenance of large equipment.
- The electrical transformer substation serving the old shredder (located in the southwest corner of the site) is equipped with secondary containment including a blind sump. A manually operated pump has been installed in the sump to evacuate the containment area, as necessary. This water is pumped into the shredder process water recycling system.
- The concrete slab underlying the hydraulic shear is served by a large sump which collects stormwater. The stormwater is pumped from the sump through two large oil/water separators (located near the dock lunchroom), and is then transferred to the shredder process water recycling system for re-use.
- Drip pans are placed beneath vehicles and equipment that show evidence of potential oil or fluid leakage, and that are parked or stored for periods longer than one shift (eight hours).

#### 4.1.2 OIL AND GREASE

Oil and grease separation is a structural control that is in extensive use at the SSP-IT facility. The following oil and grease separation control measures have been implemented for stormwater at the site.

- There are nine oil/water separators in use for stormwater treatment at the facility.
   Oil/water separators are passive, flow-through, multi-step chambers designed to
   separate floating product and settleable solids from the discharge stream. The
   oil/water separators vary in size and complexity, and are installed in discharge
   lines serving the following areas.
  - A coalescing plate oil/water separator is installed at Outfall 1. The drainage area served by this unit includes the site access road, the truck scales, remnant steel storage, and office parking. In addition to a sediment-retaining weir and oil-retaining baffle, this unit includes a bank of coalescing media plates designed to facilitate the removal of oils from the discharge stream.
  - o Each of the four sand filters in use at the site is equipped with a fourstage oil/water separator. These units serve the drainage areas that discharge along the riverfront. These areas are used for staging and storage of processed and unprocessed scrap, vehicle traffic and general site operations.
  - One eight-stage oil/water separator is installed at Outfall 13. The drainage area served by this unit, located on the dock immediately east of the shear, is used for staging of scrap metals which must be

- torch cut or otherwise dismantled either prior to, or in lieu of, being resized in the shear.
- A coalescing plate oil/water separator is installed at Outfall 14. The drainage area served by this unit includes the site road parallel to Building B and employee parking. In addition to a sediment-retaining weir and oil-retaining baffle, this unit includes a bank of coalescing media plates designed to facilitate the removal of oils from the discharge stream.
- One eight-stage oil/water separator is installed at Outfall 15. The drainage area served by this unit, located on the dock east of the shear, is used for staging of scrap metals which must be torch cut or otherwise dismantled either prior to, or in lieu of, being resized in the shear.
- o A coalescing plate oil/water separator is installed at Outfall 16. The drainage area served by this unit includes the site access road and office parking. In addition to a sediment-retaining weir and oil-retaining baffle, this unit includes a bank of coalescing media plates designed to facilitate the removal of oils from the discharge stream.
- Five single cartridge Stormwater Management StormFilters have been installed at the catch basins nearest the bay doors opening into Building B and the Mold Loft Building as shown on the site map. The devices were installed in order to address the increased risk of potential oil spills or leakage at these locations.
- Approximately 80% of the storm drain catch basins at the SSP-IT property are
  designed with inverted outflow pipes to trap oil and grease in the basin. The
  outflow pipes discharge water collected in the basin from below the water
  surface, essentially trapping oil, grease and other floating materials in the basin.
  These catch basins are located throughout the site, but are concentrated in areas
  of storage and operations (e.g., most of the non-grease trap basins are located
  along access roads and in parking areas).
- Drip pans are placed beneath vehicles and equipment that show evidence of potential oil or fluid leakage, and that are parked or stored for periods longer than one shift (eight hours).
- Small spills or releases of oil or other petroleum products are cleaned up using
  dry absorbents which are swept up and properly disposed upon completion of
  clean-up. Soils that may be impacted by small spills are removed and properly
  disposed. Detergents and solvents are not used to clean up spills.
- Oil/water separators are inspected on a monthly basis for buildup of sediments, grease, and related materials. The chambers are pumped out and cleaned by a licensed private wastewater contractor, as necessary.

Numerous additional oil and grease separation control measures are in use at the facility related to the shredder process water system and other non-stormwater related activities that are not described here.

#### 4.1.3 WASTE CHEMICALS AND MATERIAL DISPOSAL

Management controls related to waste chemicals and material disposal include both source control and structural control options. The following management practices related to waste chemical and material disposal have been implemented at the site:

- SSP's stringent scrap metal acceptance policy (included as Appendix A) requires that waste materials be removed from discarded items prior to acceptance.
- Appliances must have all electrical components removed.
- Vehicles must be drained of all fluids, including fuel, radiator and air-conditioning coolants, and lubricants.
- Lead acid batteries and mercury switches must be removed from all vehicles or equipment.
- Compressors from appliances must be removed, drained, and cut in half.
- Aerosol cans must be empty, and either punctured or crushed.
- Drums, barrels, and other containers must be thoroughly cleaned and cut open for inspection.
- Waste coolants and lubricants generated by SSP are accumulated in above ground storage tanks or drums in a covered, concrete secondary containment structure prior to periodic offsite shipment for recycling.
- Containers are properly labeled, are kept closed, and are maintained in appropriate storage areas. Any containers damaged in shipment or storage are promptly over-packed, or the contents are transferred to a sound container.
- Solvents and degreasers used in self-contained parts cleaners are periodically exchanged by an outside contractor, and waste solvents are transported offsite for recycling.
- Although uncommon, waste items delivered improperly to SSP (e.g., lead-acid batteries) are temporarily stored under cover in the maintenance building pending offsite shipment for recycling or proper disposal. Additional details related to management of unacceptable materials are included in Appendix A.

#### 4.1.4 EROSION AND SEDIMENT CONTROL

The majority of the SSP-IT property (approximately 90%) is paved. Currently unpaved areas primarily consist of narrow strips of property along the banks of the Willamette

River and around the head of the ship berthing slip. Very narrow strips of unpaved area also exist along the network of railroad tracks at the site. The following measures have been implemented at the site to control sediment and erosion:

- Four sand filters have been installed to control suspended sediment discharge with stormwater along the river. These sand filters serve Outfalls 3, 4, 5, and 6/7. Each sand filter is equipped with a high flow bypass to prevent the sand filter from constricting high flow to the point of flooding the yard. As shown on the attached site map, outfalls designated with an "A" discharge treated flow, and outfalls designated with a "B" discharge the high flow bypass. An exception to these designations occurs at Outfall 7, which is the sand filter bypass discharge from Basin 6.
- All oil/water separators at the facility are equipped with either sediment weirs or elevated discharge pipes to trap sediments in a chamber of the unit.
- Accessible areas are swept using a vacuum/broom sweeper on an average of once per week.
- Vegetation has been allowed to take root in unpaved areas along the water banks to reduce erosion. In addition, rip-rap has been historically emplaced on the slopes of the river bank which may be prone to erosion due to wave action.
- Straw bales, drain filters, or similar mechanisms are used to minimize the influx of sediment into stormwater catch basins and into the river, where appropriate.
- Facility-wide inspections are conducted at least once per month to identify areas of erosion, damaged pavement, and areas requiring sweeping.
- In areas where bulk material storage is conducted, drain covers may be emplaced during storage of materials or other activities which might contribute to suspended solids in stormwater run-off (e.g., fine particulates or dusty materials), as necessary.

#### 4.1.5 DEBRIS CONTROL

Considering the nature of facility operations, debris build-up is of significant concern. Although scrap recycling operations requires the accumulation of both processed and unprocessed scrap metals in stockpiles, SSP personnel strive to ensure that only designated areas are used for these stockpiles, and that all roadways, railways, parking areas, work areas, and buildings remain free of accumulated debris. The following measures have been implemented at the facility to control debris:

- Accessible areas are swept using a vacuum/broom sweeper on an average of once per week.
- Accessible areas are swept using a magnetic collector on an average of once per month.

- Trash dumpsters are placed strategically around the site to promote proper disposal of paper, wood, and other items that may be discarded during truck loading and offloading.
- Two trailer sweep-off areas are designated along the access road to the facility to allow suppliers to dispose of debris prior to exiting the site. Permanent threesided bins are provided at each location to contain the debris. These bins are cleaned out on a weekly basis.
- Facility-wide inspections are conducted at least once per month to identify areas of debris build-up that need cleanup.

#### 4.1.6 STORMWATER DIVERSION

Stormwater diversion controls have been implemented at the site primarily as a means of ensuring that stormwater drainage in areas that may be prone to adverse impact is either recycled, or is directed through treatment systems (e.g., oil/water separators and sand filters) prior to discharge. The following stormwater diversion measures have been implemented at the facility:

- The area immediately surrounding the shredder (approximately four acres) is paved and provided with catch basins piped to a closed-loop collection and treatment system. This water is used for cooling and dust suppression in the shredder.
- An approximate 400 foot by 60 foot concrete slab (approximately <sup>1</sup>/<sub>2</sub> acre) located along the southern property boundary near the shredder drains through two large oil/water separators. Stormwater from this slab is pumped from the oil/water separator to the shredder for use as process water make-up.
- A small paved area south of the shear (approximately <sup>1</sup>/<sub>2</sub> acre) is served by a catch basin which is also pumped to the shredder process water recycling system.
- The concrete slab underlying the hydraulic shear is served by a large sump which collects stormwater. The stormwater is pumped from the sump through two large oil/water separators (located near the dock lunchroom), and is then transferred to the shredder process water recycling system for re-use.

#### 4.1.7 COVERING ACTIVITIES

Activities and storage areas that are most prone to potentially adversely affecting stormwater quality are maintained under cover, either inside of the maintenance building, or in a roofed concrete secondary containment structure. These areas are further discussed in Section 4.1.1, above.

In addition, SSP has constructed a secondary separation system for the ASR that is completely enclosed within Building B. ASR from the shredder is loaded onto dump trucks and transferred to a large bin inside the building. A front-end loader then takes the ASR from the bin and feeds it into a hopper that delivers the material to shaker screens, separation equipment, and finally picking tables, to remove as much non-magnetic, non-ferrous metal as practical from the ASR. After passing through this system, the ASR is deposited in two large, elevated, bottom dump hoppers, that ultimately discharge the material into trucks destined for the landfill. This system results in a substantial decrease in the amount of significant materials which would be exposed to incident precipitation or stormwater run-off at the site.

Covered storage and operations areas are inspected monthly to ensure that any significant materials stored or used in the areas are being properly contained and managed.

#### 4.1.8 HOUSEKEEPING

Maintaining a clean and orderly job site is instrumental for controlling potential stormwater pollutants, as well as for ensuring a safe working environment. The following management practices related to good housekeeping are followed at the SSP-IT facility:

- Accessible areas are swept using a vacuum/broom sweeper on an average of once per week, and are swept using a magnetic collector on an average of once per month. Minimal amounts of water are used in the paved areas for dust control during dry periods.
- Trash dumpsters are placed strategically around the site to promote proper disposal of paper, wood, and other items that may be discarded during truck loading and offloading.
- Two trailer sweep-off areas are designated along the access road to the facility to allow suppliers to dispose of debris prior to exiting the site. Permanent three-sided bins are provided at each location to contain the debris. These bins are cleaned out on a weekly basis.
- Containers are properly labeled, are kept closed, and are maintained in appropriate storage areas. Any containers damaged in shipment or storage are promptly over-packed, or the contents are transferred to a sound container.
- Drip pans are placed beneath vehicles and equipment that exhibit evidence of potential oil or fluid leakage, and that are parked or stored for periods longer than one shift (eight hours).
- Facility-wide inspections are conducted at least once per month to identify areas needing cleanup and general policing.

#### 4.1.9 OTHER OPERATIONAL CONTROLS

Significant operational controls are in place at the facility that exceed the specific requirements of the NPDES General Permit. These controls include the following:

- Periodic community outreach events are conducted in order to elevate the awareness of scrap suppliers toward SSP's stringent scrap acceptance policies. These events include signage posted at SSP-IT, policy and guideline mailings, and visits to supplier facilities by SSP environmental and/or management personnel.
- An inbound material inspection program has been developed to minimize the potential for receipt of unacceptable materials. The program includes the following.
  - Passage of every load of scrap entering the facility through a radiation detector.
  - Visual screening of every load of scrap received at the facility by scalehouse personnel.
  - o Visual screening of all scrap materials offloaded from transport vehicles by equipment operators and ground personnel in the yard.
  - o Periodic thorough inspections of offloaded scrap from specific suppliers (on a rotating basis) by environmental or management personnel.

In the event that unacceptable or suspect materials are detected as a result of this program, the materials may be segregated from the scrap for proper disposal, may be returned to the supplier, or the entire load may be rejected. In any case, the supplier will be contacted and informed of the rejection, and the scrap acceptance policy will be reiterated.

#### 4.2 Spill Prevention and Response

SSP-IT maintains a written Spill Prevention, Control, and Countermeasures (SPCC) Plan, which details the specific procedures to be followed in the event of a spill or release of oil, fuel, or other petroleum product a the facility. A copy of the SPCC Plan is provided as Appendix B.

Potential causes of spills or leaks of significant materials at the facility could include container failures, equipment or vehicle leaks, and spills of shredded materials, ASR, and/or chemicals during handling or transport operations. Frequent inspections of storage, maintenance and processing areas, and inspections of vehicles and equipment are intended to identify potential problems areas, and to allow the timely detection of

any spillage prior to adversely impacting the storm sewer system, or reaching surface waters.

Spill response equipment, including containment and absorbent booms, absorbent socks and pads, and related safety equipment, are maintained on-hand in spill kits placed in strategic locations throughout the site.

Spill prevention and response provisions include the following:

- Operations personnel are equipped with radios and/or cellular phones to provide immediate communication in the event of an accidental release.
- Storm drain covers are available to block catch basins in the event of a spill which has the potential to reach a drain.
- Spill kits containing absorbent pads and booms, and other cleanup and safety supplies are placed in strategic locations throughout the site.
- An adequate supply of absorbent and containment booms and similar items are available to contain and clean up any spilled materials. Spilled materials are cleaned up using dry methods whenever possible.
- Containers of liquids, including oils and other petroleum products, are stored within secondary containment, or are placed on spill containment pallets.
- Drip pans are placed beneath vehicles and equipment that exhibit evidence of potential oil or fluid leakage, and that are parked or stored for periods longer than one shift (eight hours).
- Containers are periodically inspected to ensure that they are closed, properly labeled, and in good condition.

#### 4.3 Preventive Maintenance

Preventive maintenance involves the regular inspection, cleaning and mechanical maintenance of vehicles, equipment, and stormwater management structures, as well as other activities designed to reduce the likelihood of spills and leaks. The following preventive maintenance provisions have been implemented at the SSP-IT facility:

- A vehicle and equipment inspection and maintenance program has been developed which includes the following:
  - Regularly scheduled vehicle and equipment inspections focused on fluid leaks.
  - Service and inspection checklists specific to each type of vehicle and major item of equipment.

- Maintenance logs detailing services performed on each vehicle and major item of equipment.
- o Training requirements for personnel involved in vehicle and equipment operations, inspection, and maintenance.
- Major items of equipment that are stored or used outdoors are cleaned on a regular basis to remove accumulated oil and grease from exterior surfaces (except as necessary for proper operation).
- Vehicle and equipment maintenance is conducted within the enclosed maintenance building, to the extent possible.

During monthly site inspections, the inspector will determine whether potential pollution sources are being adequately controlled, and whether pollution controls specified in the SWPC Plan have been properly and effectively implemented. Inspections will be documented using a comprehensive Site Inspection Checklist (included as Appendix C), which will include the dates of inspection, items inspected, problems or concerns encountered, and corrective measures implemented. The facility drainage areas described in Table 1 will be included in the inspections, and the following items will be inspected, at a minimum:

- Containment structures, booms and berms, on a monthly basis, to ensure that they are intact and functional.
- Discharges from outfalls, on at least a monthly basis when occurring, to inspect for color, foam and sheen.
- Facility-wide inspections, at least once per month, to identify areas of erosion, damaged pavement, and areas requiring sweeping.
- Oil/water separators, on a monthly basis, for buildup of sediments, grease, and related materials. The chambers are pumped out and cleaned by a licensed private wastewater contractor, as necessary.

#### 4.4 Employee Education

SSP has developed a comprehensive employee training program which includes practices and procedures related to stormwater management, pollution prevention, and spill control and countermeasures. Operations personnel begin their training by viewing a stormwater pollution prevention video prepared and distributed through the Institute of Scrap Recycling Industries (ISRI). Additional training is provided by the facility's environmental and safety staff, and includes the following:

• Information on the acceptability and unacceptability of certain types of scrap and other materials.

- Proper procedures for containing or otherwise isolating unacceptable materials and spills.
- Locations of spill response kits and other emergency equipment.
- Proper notification procedures.

Training is documented using Training Record forms (included as Appendix D). Training Records are maintained for each employee for a minimum of five years, and are retained at the SSP Health and Safety office in the employee personnel files.

In addition to employee training, SSP-IT strives to educate its scrap suppliers regarding scrap acceptability, both to prevent improper receipt of unacceptable materials, and to protect site stormwater from potential pollution sources. SSP-IT has a written scrap acceptance policy (included as Appendix A) which is distributed to suppliers in periodic mailings and in frequent hand-outs when entering or exiting the facility. The policy identifies specific items that cannot be accepted, as well as particular preparation requirements for other items. The policy is periodically reviewed and updated, and updates are communicated promptly to SSP's suppliers.

#### 4.5 Recordkeeping and Internal Reporting Procedures

Records of site inspections are maintained using a comprehensive Site Inspection Checklist (included as Appendix C). This checklist provides a means for documenting the dates of inspection, items inspected, problems or concerns encountered, and corrective measures implemented.

Site Inspection Checklists, stormwater monitoring results, records of spills and associated corrective action, and preventive maintenance records will be retained on file by SSP for a minimum of five years.

Stormwater monitoring results will be tabulated and submitted in a report to DEQ's Northwest Region by July 15<sup>th</sup> of each year. Other relevant records will be made available to authorized representatives of the DEQ upon request.

#### 4.6 Plan Review and Revision Requirements

Based on the results of monthly site inspections detailed previously, the SSP-IT facility will periodically assess the overall effectiveness of this SWPC Plan, and will implement modifications or improvements to the plan, as appropriate. The periodic plan assessment will include the following:

The site map will be modified or updated to reflect current facility conditions.

- Identified potential stormwater pollution sources will be visually inspected to determine if they are being adequately and effectively controlled.
- Pollution control structures will be evaluated to determine if they have been properly installed, and to assess their effectiveness.
- Pollution control measures will be evaluated to determine if they have been properly implemented, and to assess their effectiveness.
- Spill response equipment and supplies will be inspected to ensure proper operation and adequate supply.

In addition, the SWPC Plan will be reviewed within 30 days of receipt of any sampling results demonstrating that effluent benchmarks specified in the NPDES General Permit have not been met. The purpose of this review will be to determine if the SWPC Plan has been properly and effectively implemented, and to identify any additional technically feasible and economical site controls that may be implemented to further improve the quality of stormwater discharges.

#### 5.0 MONITORING PROGRAM

In compliance with the NPDES General Permit, stormwater samples will be collected from the active discharge outfalls serving the facility four times each year, if possible. Two events will occur prior to December 31<sup>st</sup> and two will occur after January 1<sup>st</sup>. The events will be conducted no less than 14 days apart.

As specified on the Site map and in Table 1, monitoring for the purposes of this SWPC Plan will include Outfalls 3, 4, 5, 6, 14, 15 and 20. Outfall 18 will not be included for monitoring under this plan, since it is sampled monthly by a neighboring facility as part of a separate NPDES Individual Permit.

SSP has reduced the number of monitoring points at the facility based on site operations and specific activities conducted within the drainage areas, in accordance with NPDES General Permit Condition B.1(c). Discharges from multiple outfalls serving drainage areas representing similar activities, and where discharges are expected to be of similar composition, are represented by a single monitoring point. In addition, outfalls serving areas with no exposure of stormwater to industrial activities will not require monitoring.

Visual monitoring at all outfalls and at areas of potential pollutant contact is required during at least one storm event per month during the rainy season (approximately October through April) that results in at least one hour of continuous discharge. In addition, visual monitoring at each outfall is required at least twice during the dry season (approximately May through September). These visual monitoring requirements will be met through monthly site inspections conducted as described in Section 4.0.

Collected stormwater samples must be representative of the discharge from the facility, and will be analyzed in accordance with the approved methods specified in 40 CFR 136.

Stormwater samples collected during the sampling events will be delivered to a laboratory for analysis for the parameters required by the NPDES General Permit, as summarized in Table 3.

Table 3: Stormwater Sample	Analytical Requirements	
PARAMETER	ANALYTICAL METHOD	EFFLUENT BENCHMARK
Total Copper	EPA 6010B	0.1 mg/l
Total lead	EPA 7421	0.4 mg/l
Total Zinc	EPA 6010B	0.6 mg/l
рН	EPA 150.1	5.5 to 9.0 s.u.
Total Suspended Solids (TSS)	EPA 160.2	130 mg/l
Oil & Grease	EPA 413.1	10 mg/l
Floating Solids (associated with industrial activities	) Visual Observation	No Visible Discharge
Oil & Grease Sheen	Visual Observation	No Visible Sheen

The results of stormwater sample analyses will be tabulated and submitted to the DEQ's Northwest Region by July 15<sup>th</sup> for the preceding reporting period (July 1<sup>st</sup> through June 30<sup>th</sup>).

In the event that stormwater monitoring results indicate that a pollutant parameter for which the receiving water is water quality limited is being discharged in significant concentrations, a waste load allocation may be added to the permit conditions by the DEQ.

In the event that stormwater monitoring results indicate that a pollutant parameter is being discharged at a concentration that may be a threat to the water quality of the receiving stream, additional effluent limits may be added to the permit conditions by the DEQ.

Sample analytical results and periodic visual inspection observations will be evaluated by SSP-IT's Stormwater Pollution Prevention Team during periodic SWPC Plan effectiveness assessments to determine if modified or additional stormwater management practices and/or structural controls are warranted. The SWPC Plan will be revised as appropriate, and employees will be properly trained as necessary.

#### 6.0 IMPLEMENTATION SCHEDULE

Revision of the facility's SWPC Plan will be conducted in accordance with schedules provided in the NPDES General Permit 1200-Z, as applicable.

Site controls determined to be warranted based on SWPC Plan review (as described in Section 4.6) will be implemented in a timely manner, and will be incorporated into the SWPC Plan as an update.

#### 7.0 ADDITIONAL PERMIT REQUIREMENTS

#### 7.1 Waste Disposal Wells

Oregon Administrative Rule (OAR) 340-44-50 provides specific requirements for the use of waste disposal wells for stormwater drainage. The SSP-IT facility does not use waste disposal wells for stormwater drainage.

#### 7.2 Surface Water Temperature Management Plan

Individual stormwater dischargers are not expected to cause a measurable increase in stream temperature. Compliance with the NPDES General Permit meets the requirement of OAR 340-41-26(3)(a)(D) to develop and implement a surface water temperature management plan. However, in the event that the Total Maximum Daily Load (TMDL) for temperature is being exceeded by stormwater dischargers in a specific river basin, additional management practices to reduce the temperature of discharges may be required. Such management practices may include increasing vegetation to provide shading, construction of underground conveyance systems or detention structures, or installation of filtration devices to reduce above-ground detention times.

In the event that additional temperature management controls are required by the DEQ, SSP-IT will revise the SWPC Plan to include management practices focused on reducing discharge temperatures, as necessary.

#### 7.3 Specific River Basin Requirements

The SSP-IT facility lies within the Willamette River Basin. Water quality standards for the Willamette River Basin are provided in OAR 340-041-0442 through OAR 340-041-0470.

In general, the effluent benchmarks specified in NPDES General Permit 1200-Z are expected to meet the water quality requirements for the Willamette River Basin. However, in some cases, monitoring requirements of the General Permit are not directly applicable for demonstrating compliance with Willamette Basin water quality standards.

For example, based on the requirements of OAR 340-041-0445(2)(c), no more than a 10% cumulative increase in natural stream turbidities is allowed for a discharger, as measured relative to a control point immediately upstream of the turbidity causing activity. However, the NPDES General Permit does not require monitoring for turbidity, but for total suspended solids (TSS). Although the benchmark for TSS is expected to be protective of the turbidity standard, no direct correlation between the two measurements has been determined.

The DEQ is currently addressing this situation by modifying the NPDES General Permits for specific watersheds. In the event that additional monitoring or management controls are required by the modified permits (provided they apply to the SSP-IT facility), SSP-IT will revise the SWPC Plan to include those monitoring requirements and management practices, as necessary.

#### 8.0 PLAN APPROVAL AND CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

\Signature

im Goodrich

General Manager

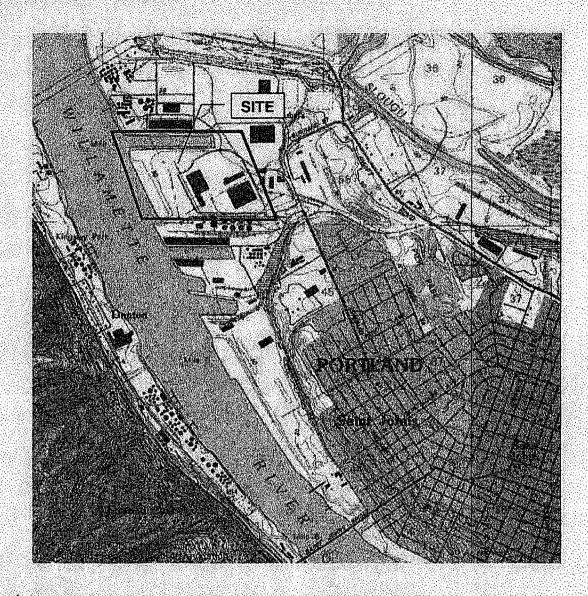
Schnitzer Steel Products Co.

//-/6 -07 Date

### **FIGURES**

SSP Stormwater Pollution Control Plan

November 2007





# SCHNITZER STEEL PRODUCTS CO. Portland, Oregon

Figure 1: Site Location Map

### APPENDIX B SPILL PREVENTION, CONTROL, AND COUNTERMEASURES (SPCC) PLAN

#### APPENDICES



#### Appendix A **Substantial Harm Determination**

Facility Name: Schnitzer Steel Industries - Burgard Yard

Facility Address: 12005 N. Burgard Road - Portland, Oregon

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

Yes

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground storage tank area?

Yes

No X

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in 40 CFR part 112 Appendix C, Attachment C-III or a comparable formula) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments?

Yes

No X

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in 40 CFR part 112 Appendix C, Attachment C-III or a comparable formula) such that a discharge from the facility would shut down a public drinking water intake?

Yes

No X

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?

Yes

No X

#### Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

ENVIRONMENTAL ADMINISTRATOR

MATHEW J. CUSMA

28 DEC 06

Name (type or print)

Date



## Appendix B Discharge Notification Form

Part A: Discharge Inf	ormation		
General information will Name:	nen reporting a spill to outs Schnitzer Steel Industrie	es, Inc.	
Address:	12005 N. Burgard Road		
	Portland, OR 97203		
Telephone:	(503) 286-6944	ina Ina	
Owner/Operator:	Schnitzer Steel Industri 3200 NW Yeon Avenue		•
	Portland, OR 97210		
Primary Contact:	Mathew Cuema, Enviro	onmental Administra	itor
•	Work: (503)28	6-6944	
	Work: (503)28 Cell (24 hrs): (b) (6)		
Type of oil:	·	Discharge Date	and Time:
Quantity released:		Discovery Date	and Time:
Quantity released to a	waterbody:	Discharge Dura	ation:
Location/Source:			
Actions taken to stop.	remove, and mitigate impa	acts of the discharge	
	, <b>g</b>		
		a way to date a	
Affected media:			
G air		G storm water	
G water			l-water separator
G soil		G other:	
Notification person:		Telephone con	tact:
5		Business:	
		24-hr:	
Nature of discharges,	environmental/health effe	cts, and damages:	•
Injuries, fatalities or e	vacuation required?	and the second	
Part B: Notification	Checklist		
		Date and time	Name of person receiving call
Discharge in any an	nount		
	ronmental Administrator		
(503)286-6944 / (503		<u> </u>	<u> </u>
Discharge in amour	it exceeding 10 gallons a	nd not affecting a	waterbody or groundwater
Mathew Cusma, Env	ironmental Administrator		•
(503 286-6944	,	,	
(503) 209-6057			





Discharge in any amount and affecting (or threa	tening	to affec	t) a water	body		
Oregon Emergency Management Division 24- hour Spill Reporting Number (800) 452-0311						
National Response Center (800) 424-8802						
Medical Response, Police, Fire 911						• .
Spill Supplies/Equipment - PetroSorb (503) 205-7750					 	

<sup>\*</sup> The POTW should be notified of a discharge only if oil has reached or threatens sewer drains that connect to the POTW collection system.

### Appendix C Calculation of Secondary Containment Capacity

The maximum 24-hour rainfall recorded in the last 25 years at this location is 3.90 inches.

#### **Bulk Storage Containment (Building B)**

Capacity of Largest Tanks within the Secondary Containment Area: = 500 gallons (on legs, no significant displacement)

Dike Dimensions:
Dike footprint = 15 feet x 5 feet

Dike height = 15 inches = 1.25 feet Dike volume = 15' x 5' x 1.25' = 93.75 ft<sup>3</sup> x 7.48 gal/ft<sup>3</sup> = 701 gallons

Available Freeboard for Precipitation: 701 gallons - (500 gallons) = 201 gallons 201 gallons / 7.48 gallons/ft<sup>3</sup> / (15 ft x 5 ft) = 0.36 ft = 4.3 inches

The containment therefore provides sufficient storage capacity for the largest bulk storage tank within the containment area, tank displacement, and precipitation. The containment capacity is equivalent to 140% of the capacity of the largest container ((701 gallons)/500 gallons).

The containment therefore provides sufficient storage capacity to contain both the largest storage compartment and the volume of precipitation that enters the containment.



## Appendix D Facility Inspection Checklists

The following checklists are to be used for monthly and annual facility-conducted inspections. Completed checklists must be signed by the inspector and maintained at the facility, with this SPCC Plan, for at least three years.



Monthly Inspection Checklist

This inspection record must be completed each month except the month in which an annual inspection is performed. Provide further description and comments, if necessary, on a separate sheet of paper and attach to this sheet. \*Any item that receives "yes" as an answer must be described and addressed immediately.

	Y*	N	Description & Comments
Storage tanks			
Tank surfaces show signs of leakage			
Tanks are damaged, rusted or deteriorated			
Bolts, rivets, or seams are damaged			
Tank supports are deteriorated or buckled			
Tank foundations have eroded or settled			
Level gauges or alarms are inoperative			
Vents are obstructed			
Secondary containment is damaged or stained			
Water/product in interstice of double-walled tank			
Dike drainage valve is open or is not locked			
Piping			
Valve seals, gaskets, or other appurtenances are leaking		l	
Pipelines or supports are damaged or deteriorated			
Joints, valves and other appurtenances are leaking			
Buried piping is exposed	<u> </u>		
Loading/unloading and transfer equipment			
Loading/unloading rack is damaged or deteriorated			
Connections are not capped or blank-flanged			
Secondary containment is damaged or stained			
Berm drainage valve is open or is not locked			
Oil/water separator			
Oil/water separator > 2 inches of accumulated oil		· .	
Oil/water separator effluent has a sheen			
Security			
Fencing, gates, or lighting is non-functional			
Pumps and valves are locked if not in use			
Response Equipment			
Response equipment inventory is complete			

			-
Date:	Signature:	· :	
ponse equipment inventory is complete			=
ponse Equipment			_
ps and valves are locked if not in use			_
cing, gates, or lighting is non-functional			_
urity		•	_



#### **Annual Facility Inspection Checklist**

This inspection record must be completed each year. If any response requires further elaboration, provide comments in Description & Comments space provided. Further description and comments, if necessary, must be provided on a separate sheet of paper and attached to this sheet. \*Any item that receives "yes" as an answer must be described and addressed immediately.

	Y*	N	Description & Comments
Storage tanks			
Tank #1			
Tank surfaces show signs of leakage			
Tank is damaged, rusted or deteriorated			
Bolts, rivets or seams are damaged			·
Tank supports are deteriorated or buckled			
Tank foundations have eroded or settled	F		
Level gauges or alarms are inoperative			
Vents are obstructed			·
Tank #2			
Tank surfaces show signs of leakage			
Tank is damaged, rusted, or deteriorated			
Bolts, rivets, or seams are damaged			
Tank supports are deteriorated or buckled			
Tank foundations have eroded or settled	1		
Level gauges or alarms are inoperative		1	
Vents are obstructed	1	1	·
Tank #3	<u> </u>	<b>†</b>	
Tank surfaces show signs of leakage		T	·
Tank is damaged, rusted, or deteriorated			
Bolts, rivets, or seams are damaged			
Tank supports are deteriorated or buckled	<u> </u>	T	
Tank foundations have eroded or settled	1		
Level gauges or alarms are inoperative	<b>†</b>	1	
Vents are obstructed		1	
Tank #4			·
Tank surfaces show signs of leakage			
Tank is damaged, rusted or deteriorated			
Bolts, rivets or seams are damaged			
Tank supports are deteriorated or buckled	T	T	
Tank foundations have eroded or settled		T	
Level gauges or alarms are inoperative			
Vents are obstructed			
Oil is present in the interstice	<b>T</b> _	T	
Tank #7	1	1	·.
Tank surfaces show signs of leakage	1		
Tank is damaged, rusted, or deteriorated	1		







	Y*	N	Description & Comments
Bolts, rivets, or seams are damaged			
Tank supports are deteriorated or buckled			
Tank foundations have eroded or settled			
Level gauges or alarms are inoperative			
Leakage in exhaust from heating coils			
Concrete dike			
Secondary containment is stained			·
Dike drainage valve is open or is not locked			
Dike walls or floors are cracked or are separating			
Dike is not retaining water (following large rainfall)			·
Piping			
Valve seals or gaskets are leaking			
Pipelines or supports are damaged or deteriorated			
Joints, valves and other appurtenances are leaking			
Buried piping is exposed			
Out-of-service pipes are not capped			
Warning signs are missing or damaged			·
Loading/unloading and transfer equipment			
Loading/unloading rack is damaged or deteriorated			
Connections are not capped or blank-flanged			
Rollover berm is damaged or stained			
Berm drainage valve is open or is not locked			` "
Drip pans have accumulated oil or are leaking		<u> </u>	
Oil/water separator			
Oil/water separator > 2 inches of accumulated oil			
Oil/water separator effluent has a sheen			
Security			
Fencing, gates, or lighting is non-functional			
Pumps and valves are not locked (and not in use)			·
Response equipment			
Response equipment inventory is incomplete			





#### Appendix E - Spill Contingency Procedures and Emergency Information

#### SPILL CONTINGENCY PROCEDURES

If oil/fuel associated with onsite activities is spilled, attending Jackson Oil personnel will perform the following.

- ♦ IMMEDIATELY shut down transfer operations.
- Determine potential fire/explosion hazard; if hazard poses immediate threat to human life/health, evacuate facility and notify appropriate emergency agencies.
- Place absorbent pads and/or socks in the path of the spill and affected drainage area.
- Notify the primary/secondary Jackson Oil contact identified below for assistance with containment, cleanup and potential notification procedures.

#### **EMERGENCY INFORMATION**

Schnitzer Steel Industries, Inc. - Portland City, Oregon

Primary Contact: Mathew Cusma (after hours)

(503) 903-7327

Office:

(503) 286-6944

National Response Center 24-Hour Spill Reporting Number:

1-800-424-8802

Oregon Emergency Management Division 24-Hour Spill Reporting Number:

(within state)

1-800-452-0311

(out of state)

(503) 378-4124

Spill Supplies/Equipment:

PetroSorb – 2800 NW 31<sup>st</sup> Avenue, Portland, Oregon

(503) 205-7750

Medical Response, Police, Fire:

911

**Nearest Emergency Medical Facility:** 

Emmanuel Hospital



#### Appendix F - Record of Annual Discharge Prevention Briefings and Training

Briefings will be scheduled and conducted by the facility owner or operator for operating personnel at regular intervals to ensure adequate understanding of this SPCC Plan. The briefings will also highlight and describe known discharge events or failures, malfunctioning components, and recently implemented precautionary measures and best practices. Personnel will also be instructed in operation and maintenance of equipment to prevent the discharge of oil, and in applicable pollution laws, rules, and regulations. Facility operators and other personnel will have an opportunity during the briefings to share recommendations concerning health, safety, and environmental issues encountered during facility operations.

Date	Subjects Covered	Employees in Attendance	Instructor(s)
•			
	·		





### Appendix G Discharge Response Equipment Inventory

The discharge response equipment inventory is verified during the monthly inspection and must be replenished as needed.

#### Tank Truck Loading/Unloading Area

G	Empty 55-gallons drums to hold contaminated material	4
G	Loose absorbent material	200 pounds
G ·	Absorbent pads	3 boxes
G	Nitrile gloves	6 pairs
G	Neoprene gloves	6 pairs
$\mathbf{G}_{\cdot}$	Vinyl/PVC pull-on overboots	6 pairs
G	Non-sparking shovels	3
G	Brooms	3
G	Drain seals or mats	2
G	Sand bags	12

#### **Maintenance Building**

G	Empty 55-gallons drums to hold contaminated material	1
G	Loose absorbent material	50 pounds
G	Absorbent pads	1 box
G	Nitrile gloves	2 pairs
G	Neoprene gloves	2 pairs
G	Vinyl/PVC pull-on overboots	2 pairs
G	Non-sparking shovels	-
G	Brooms	1
G	Drain seals or mats	1

# APPENDIX C SITE INSPECTION CHECKLIST

SSP Stormwater Pollution Control Plan

November 2007

## SITE INSPECTION CHECKLIST SCHNITZER STEEL PRODUCTS CO. - INTERNATIONAL TERMINAL Stormwater Pollution Control Plan

Date

Inspection Items		atus / Unacceptable	Comments	Recommended Corrective Action	Date Completed	Initials
Catch Basins						
Unobstructed/operative			H 31.1.158			·
Skimmers present			A. A. A.			
Grates in good condition						
Stencils legible (where appropriate)						
Vehicles/Equipment			and the second second			
Oil leaks						
Drip pans in place						
Pavement						1.
Condition/repair					<u> </u>	
Swept/free of buildup						<b>†</b>
Evidence of spill or leakage						T
Debris, refuse						
Trailer sweep-off bins					-	
Trash dumpsters						
Other	Ī					1
Spill response kits						
Unnacceptable or suspect materials						
Containers						1
Kept closed						
Properly labeled						<u>                                     </u>
In good condition						$\vdash$
No signs of leakage or spillage		:			T	1
Outfalls			a la			1
Floating solids						
Oll&Grease sheen	1				<del> </del>	1
Oil/Water Separators		<del></del>			<del>                                     </del>	1
Sediment buildup		<del></del>			<del> </del> -	<del> </del>

# APPENDIX D TRAINING RECORD FORM

SSP Stormwater Pollution Control Plan

November 2007

### STORMWATER POLLUTION CONTROL PLAN TRAINING RECORD

PARTICIPANT'S NAME	Instructor Signature: PARTICIPANT'S JOB TITLE/POSITION	PARTICIPANT'S SIGNATURE
		PARTICIPANT'S SIGNATURE
	PARTICIPANT'S JOB TITLE/POSITION	PARTICIPANT'S SIGNATURE
, , , , , , , , , , , , , , , , , , , ,		
	·	
		<del></del>
	*	